**Salem Irrigation and Canal Company**

Encroachment Application

Packet

Guide for Application, Review, and Approval Process

with

Salem Irrigation and Canal Company

(SICC)

For Encroachment upon SICC Easements & Facilities

**March 2022**

This packet is intended to assist Applicants in working with Salem Irrigation and Canal Company (SICC). All Applicants are required to obtain permission from SICC to do work affecting SICC facilities, easements, and if applicable, adjacent private shareholder ditches diverting from SICC facilities. In this document the term “SICC facilities” refer to those irrigation facilities that will be affected by the proposed construction activities owned by SICC as well as any adjacent private shareholder ditches diverting from SICC facilities. SICC facilities include all of its Canal, Laterals and diversion pipes and ditches.

Any desired development and/or construction activities that will affect SICC facilities or easements must go through the Application, Review, and Agreement Process. SICC retains a registered professional engineer for review of all plans that affect SICC facilities and easements.

The following is a guideline for the Application, Review, and Agreement Process affecting SICC facilities and easements:

• The Applicant uses the guidelines in the application packet to provide the design of the affected SICC facilities to SICC standards.

• SICC is to receive the application, application fees, and drawings. The review process will not begin until these three items have been received.

• The SICC Engineering consultant will review the drawings, including the plat map. A meeting will be held with the engineering consultant and SICC to discuss the development and the potential impact to SICC facilities. All items from the checklist are required to be addressed, and the plans are to meet SICC standards.

• Bonding is required by SICC. When the drawings are accepted as complete by SICC, the Applicant will provide a cost estimate to SICC for the construction of SICC facilities so the bonding amount can be determined. Once the bonding amount has been determined, the Applicant should have their bank prepare the bond.

• Easements for SICC facilities must be recorded with the Utah County Recorder. Easements shall be shown on the recorded Plat Map for the subdivision. Proof of record for the irrigation easements must be submitted to SICC before the encroachment agreement will be prepared. Easements shall be in the name of Salem Irrigation and Canal Company.

• An Encroachment Agreement will be prepared between the Applicant and SICC once all of the above mentioned items have been completed. Three copies of the agreement will be sent to the Applicant for signature. The Applicant will then mail or deliver the agreement to the SICC president for discussion and approval at the next SICC board meeting.

• Once the encroachment agreement has been signed by the Applicant and SICC, permission will be granted to the Applicant to begin the construction phase in accordance with the agreement.

• The Applicant is required to notify SICC at least 24 hours in advance of beginning construction on SICC facilities, as outlined in the agreement.

• Representatives from SICC will make site visits for construction review of the facilities to see construction progress. It is the responsibility of the Applicant to provide inspection of the work and to ensure the work is completed in accordance with the agreement.

• After construction is complete, a final walkthrough will be done by SICC to identify any final items that need to be completed before work is accepted by SICC. A punch list will be prepared and sent to the Applicant listing any deficiencies.

• If agreed upon construction changes altered where SICC facilities were installed, and the easement was already recorded, an updated easement document will need to be recorded by the Applicant prior to final acceptance by SICC.

• When all these items are complete, SICC will send a letter of acceptance to the Applicant stating the SICC facilities are accepted and complete.

**SALEM IRRIGATION AND CANAL COMPANY**

**APPLICATION FOR DEVELOPMENT & SUBDIVISIONS**

Application for Agreement to Encroach and Construct within

Salem Irrigation and Canal Company (SICC) Right-of-Way or Easement

1. Applicant for Encroachment Agreement (Applicant): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Mailing Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Contact Person: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Telephone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Contact Person (if different than #1): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Company Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Mailing Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Telephone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Engineering Company: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Mailing Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Telephone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Contact Person: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Brief Description of Proposed Construction (include location and subdivision name, if applicable):

5. Attach two (2) 11x17 copies of plans/design drawings for the proposed construction. Plans shall be drawn to engineering industry standards. Design checklists are available to assist engineers in designing to industry standards.

6. Attach a check for $8,000 for the application and review fee. The application fee will be used by SICC for purposes of administration, coordination, consulting engineer review, preparation of agreements, construction review, legal guidance, and any other expenses incurred related to this application. If costs incurred by SICC are greater than the application fee, the Applicant will be responsible to reimburse SICC for the remainder of the expenses.

Please make all checks payable to: Salem Irrigation and Canal Company.

7. Send application, plans, and application fee by mail or email to:

Soren Christensen, President, Salem Irrigation and Canal Company

P.O. Box 1306, or if by hand, 628 South 550 West

Salem, UT 84653

Phone: (435) 901-4338

1. The SICC bonding requirements are as follows: Bonding will be 110% of the total cost of construction of SICC facilities. Upon completion of construction, approval by SICC, and successful delivery of water through the system, 100% of the bond will be released. One year after the project has been accepted and approved by SICC, and pending no problems with the facilities, the remaining 10% of the bond will be released. All bond releases are subject to approval by SICC.
2. New, or modified easements for SICC must be recorded with the Utah County Recorder.
3. Starting construction without prior written approval in the form of an Encroachment Agreement from SICC will result in an additional fee assessment of $5,000. This fee may be taken from the bond if the Applicant does not pay within 30 days upon receipt of a written invoice.
4. If costs incurred by SICC are greater than the application fee, the Applicant will be responsible to reimburse SICC for the remainder of the expenses. These additional costs may be taken from the bond if the Applicant does not pay within 30 days upon receipt of a written invoice.
5. The review process will not begin until the application fee is paid.
6. The submitted application is valid for six months from the date submitted. The Encroachment Agreement must be signed within this same six month period. Once the Encroachment Agreement is signed, the Applicant has one calendar year to complete work on SICC facilities.
7. This application cannot be sold to other parties. If the Applicant chooses to sell the property associated with this application, the submitted application is void, and the new property owner is required to begin the application process again.

I have read, understood, and agree to the terms of this application.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

Signature of Applicant Printed Name/Title Date

**DEVELOPMENT DESIGN CHECKLIST**

This checklist is intended to assist in designing projects to Salem Irrigation and Canal Company (SICC) standards. All projects seeking acceptance by SICC must be designed to these standards. When used correctly, this checklist will expedite the review and encroachment agreement process. Not all items on this checklist will be applicable to every project.

SICC will not be responsible for design of Applicant’s facilities. It is the responsibility of the Applicant and their engineer to design the project to SICC standards. No approval or acquiescence by SICC will operate as a waiver or modification of SICC standards.

Final development drawings must be designed, prepared, and stamped by a licensed professional engineer.

The Applicant will install the facilities that are constructed through the application process with no interruption of SICC operations.

SICC reserves the right to make exceptions to these standards or impose other requirements, dependent upon the Applicant’s project.

**GENERAL GUIDELINES:**

 Appropriate application must be filled out and all application fees submitted.

 All drawings must be stamped, signed, and dated by a licensed professional engineer and must be professionally designed and drafted to current engineering standards. Drawings may be stamped after they are ready for the encroachment agreement.

 Show all existing SICC facilities affected by the development.

 Show new location of all pipes. All open channel ditches must be piped. No siphons will be allowed.

 Submit Plat Map; all SICC facilities must have recorded easements (see Easements section).

 All streets must be labeled properly.

 All concrete used in construction shall have a minimum compressive strength of 4,000 psi. The concrete mix shall include air entrainment between 5% and 7%.

 Apply Swellstop, Waterstop RX, or SICC Consulting Engineer approved equivalent to all concrete cold joints to prevent water seepage.

 Before submitting drawings to SICC, please review and verify that all notes, references, and labels are correct and accurate.

 Bonding is required on all SICC facility improvements. After drawings have been deemed acceptable, please submit a detailed cost estimate of construction (materials and labor) of SICC facilities. Once this has been checked, the bond amount will be set.

 Notes to be added to the drawing set under heading “Salem Irrigation and Canal Company Notes”:

o Applicant must notify SICC at least 24 hours before construction on SICC facilities. Call Cody Orton with SICC at 801-362-5548, or Soren Christensen. Failure to do so may result in a $5,000 fine.

o All construction must be done to SICC standards.

o SICC contact during construction: Cody Orton at 801-362-5548.

**PIPES**

 When piping SICC facilities, SICC standards require fused high density polyethylene (HDPE) pipe with a minimum of ¾-inch wall thickness.

 All pipes on all drawings must be specifically labeled for pipe type and size (i.e. 15-inch HDPE). Specify inside diameter, pressure rating, etc.

 Any pipe replacing an open SICC ditch shall have a minimum inside diameter of 15 inches.

 All pipe sizes must be designed to carry sufficient flow for irrigation demands with 20% additional capacity for freeboard/emergencies. Coordinate with SICC for flow requirements before beginning design of SICC facilities.

 Plan and profile view of each pipe is required.

 Under roadways – trench detail is required showing bedding detail. SICC standards require bedding 6 inches below pipe and 6 inches above, using ¾-inch clean crushed rock unless specified otherwise by manufacturer.

 Yards, fields, etc. – trench detail is required showing bedding detail. SICC standards require bedding 6 inches below pipe up to springline, using ¾-inch clean crushed rock unless specified otherwise by manufacturer.

 “Irrigation” marking tape shall be installed 18 inches above the pipe to help protect pipe from future excavations. Also, Applicant will ensure that relocated facility is registered with Blue Stake.

 All backfill materials shall be compacted to a minimum of 95% standard Proctor density.

 Irrigation cleanout boxes are required at a minimum 500 feet, and at all alignment changes.

 Pipes or other utilities running parallel to the irrigation pipe in a shared easement shall be placed a minimum of 5 feet horizontally from the edge of the irrigation pipe.

 Pipes crossing perpendicularly over or under the irrigation pipe shall have a minimum 1 foot vertical clearance.

 Pipes crossing perpendicular to an open SICC ditch shall be designed to have a minimum of 24-inches of clearance from the bottom of the canal to the top of the pipe.

 Pipes crossing perpendicular to an open SICC ditch shall be re-built with materials and standards equal to or better than the existing embankments.

 Pipes crossing perpendicular to an open SICC ditch should be designed to cross perpendicular (between 70 and 90 degrees).

 Open cut crossings of SICC ditches, when allowed, require replacing linings to re-establish the original construction style and materials (i.e., disturbed concrete lining panels should be removed in their entirety and replaced, membrane lining, clay lining, shall be re-established) or the materials and method approved on the construction drawings.

 Open cut crossings of SICC ditches, when allowed, require select, compacted backfill around the pipe and up to the level of canal lining material across the complete distance of the SICC easement or right-of-way.

 Re-establishment of clay lining is to be a minimum of 12-inches thick. An approved source of clay is required.

 The process of re-establishment of canal linings shall be inspected by SICC or approved representative. If canal linings are installed without SICC inspection, the lining will be removed and replaced at contractor expense.

**IRRIGATION/CLEANOUT BOXES**

 Detail drawings are required for irrigation boxes.

 All boxes must be correctly labeled showing size and dimensions.

 Boxes must show all pipes entering and exiting.

 Boxes shall have a minimum inside dimension of 4-feet by 4-feet. There shall be a minimum of 6 inches on each side of the pipe to the edge of the box.

 Boxes must be labeled to show distance between pipe and bottom of box (typically 6 inches).

 Boxes must show all gates with gate detail or specifics as to gate type, size, flow direction, etc. Waterman C-10 canal gates, or approved slide gates are required on all improvements.

 Lid/grate detail required:

o Solid lids marked “IRRIGATION” are required when debris and soil can enter.

o Grates should be used on diversion boxes with gates and where debris will not enter.

 Knock-out boxes are not allowed. All boxes shall be pre-cast with cored openings for the pipes or shall be cast-in-place.

 Pipes entering boxes shall be concreted on the outside and grouted on the inside and installed with an approved thrust restraint system.

 Irrigation boxes shall not be completely buried. They shall extend 6 inches above the surface of the final grade. Any existing boxes that do not extend to the final grade surface shall be raised 6 inches above final grade.

 Boxes are required at each direction change and/or on each side of a road crossing, and where two pipes of a different type come together.

 Tracer Wire to be installed in all facility pipe.

 Boxes shall have metal sign attached to grate that reads:

Property of Salem Irrigation and Canal Company

Irrigation Box May Not Be Fenced Within Property

Salem Irrigation and Canal Company Must Have Access from City Streets

**INLET AND OUTLET STRUCTURES**

 Concrete flared end sections are required (pre-fabricated or cast-in-place) where a pipe will connect to a soil-lined ditch. Where a pipe will connect to a concrete-lined ditch, cast-in-place concrete shall be used and formed as a gradual transition from the pipe to the ditch.

 Trash racks are needed for all inlets from open ditches showing:

o Spacing details: 4-inch spacing for most inlets, 8-inch spacing for pipes over 36 inches in size.

o Slope 2:1 (H:V) or flatter.

o Mounting details.

o Trashracks are to be 18-inches to 24-inches wider than the pipe and designed with overflow capability.

 If transitioning to or from a soil-lined ditch, the detail should show riprap appropriately designed to protect the structure:

o Riprap sized for velocities.

o Appropriate length and location for riprap.

**EASEMENTS**

 Easements are required to be recorded with the Utah County Recorder for all SICC facilities:

o Plat Maps are best to have these easements recorded.

o If the plat has already been recorded, the owner can grant the easement with a legal description and have this recorded. Provide the legal description to SICC and an easement agreement will be prepared and sent for signatures.

o Proof of the record must be submitted to SICC.

 Easements are to be 10-feet wide, minimum, centered over the pipe. Easements shall be in the name of the Salem Irrigation and Canal Company.

 Notes to be added to the Plat Map under heading “Salem Irrigation and Canal Company Notes:”

o No trees or shrubs in irrigation Salem Irrigation and Canal Company easements.

o No telephone boxes or power boxes in irrigation Salem Irrigation and Canal Company easements.

o Fences disturbed during construction activities must be replaced and returned to pre-construction condition, or better.

o Irrigation boxes may not be fenced in yards. Direct, open access (not through fences) must be provided to Salem Irrigation and Canal Company from city streets.