

SETTLERS IRRIGATION DISTRICT STANDARD GRAVITY IRRIGATION SPECIFICATIONS,

PLAN REVIEW GUIDELINES, PROCEDURE & PROCESS.

All proposed developments impacting any irrigation facilities/easements are required to be reviewed and approved by the governing agency/irrigation entity. If approved and a License Agreement is required then the License Agreement must be in place prior to any construction occurring. All construction intended to occur during the following non-irrigation season must have the plan review process completed by October 15th. Any plans not approved by October 15th will not be approved for construction until the following non-irrigation season.

PURPOSE: The following information provided below is designed to aid property owners, developers and engineers through the approval process, reduce costs to the developer, save time for both parties, and reduce plan review time by outlining the standard details which are accepted by Settlers Irrigation District.

NOTE: The Settlers Irrigation District typical standards for gravity irrigation are subject to conformity given a non-typical environment/scenario. Any deviation from the approved plans must be approved by Settlers Irrigation District in writing, prior to changes occurring in the field. If changes are approved, the engineer is required to provide updated/as built plans to the District. Any issues impacting Settlers Irrigation District facilities not addressed by the following must be approved in writing by the Settlers Irrigation District prior to construction.

INITIAL PROCESS: All developmental/proposed projects impacting any irrigation/drainage facility or easements must first submit plans to the appropriate irrigation/drainage district or Lateral Users Association for review and comment (Prior to commencement of any construction). The following must be included with the initial plan set when delivered to Settlers Irrigation District: 1) a Land Use Change Application; 2) a Single Assessment Form; and 3) an initial plan review fee. These documents and the plan review fee amount are located on our website. Additional plan review fees may be applied/billed based on the complexity of the project.

Once construction plans meet the requirements of Settlers Irrigation District, Settlers Irrigation District will stamp the approved plans and provide an approval letter which will indicate what is approved, the date of the plans which are approved and direct the developer or engineer to contact the District's attorney to prepare a License Agreement. It is then up to the developer or engineer to obtain the proper agreement or agreements from the District's attorney, <https://www.sawtoothlaw.com/locations/boise-location/> ATTN: Bryce Farris. Include any required documents which may be required by Mr. Farris to

prepare the necessary agreement. Generally, Mr. Farris will require the following in order to prepare a license agreement: 1) a deed and legal description of the property; 2) approved plans (plans approved by the District); 3) submittal explaining the impact to the District's facilities and the purpose of the license agreement; and 4) a fee to prepare the agreement. Mr. Farris may require additional information, including a new easement description, if the project involves the piping and relocation of a District facility. The agreement(s) will be drafted and returned to the submitter for signature. The signee must then return the original signed agreement to Mr. Farris to have signed at the following District Board meeting. Once signed, the agreement will be recorded with Ada Co. Recorder's office. Once this process has been completed, the contractor may begin work. Any work impacting irrigation facilities may occur during the time period of October 15th – March 15th with the exception of the McMullen Lateral in which work must be completed by March 1st per the "Period of Use" ground water rights of the two wells located in Sec.26 04N 01W & Sec.28 04N 01W.

CONSTRUCTION SPECIFICATIONS: Any piping or tiling of gravity irrigation facilities owned and operated by Settlers Irrigation District must be constructed in Class 3 or Class 5 reinforced concrete pipe (RCP). Class 3 will be accepted in locations of low load capacity, and Class 5 is required at any location to be crossed by any vehicular traffic or greater load.

Precast and cast in place boxes are acceptable with a maximum distance of 400' separation and at any point required for change in direction.

On all precast boxes, the contractor is required to (w/approved material) grout & seal both the in and outside of any inlet/outlet, ring, riser, or caps joints, all of which require inspection by the District prior to backfill.

All piping/tiling to be laid in a clean bed of ¾ chip. Once pipe is set and grade is verified, contractor may back fill with ¾ chip to the haunch/spring line of the pipe leaving the remainder of the pipe and each joint exposed for inspection. Any buried joints will need to be exposed by the contractor prior to requesting inspection. Any joints with a gap 1" or greater will be marked in a bright purple paint. The contractor is required to grout and seal marked joint/s from the inside of the pipe with approved grout and sealant. Project will not be approved for complete backfill until inspector verifies pipe has been grouted and sealed from the inside correctly. Once approved, contractor may backfill with a clean material.

Per Idaho Code section 42-1207 any facility piped for the benefit of the current land owner or thereafter, shall be the responsibility of said land owner.

<https://legislature.idaho.gov/statutesrules/idstat/title42/t42ch12/sect42-1207/> This shall be a requirement of the License Agreement authorizing any piping/tiling.

BOXES: All boxes are required the following,

- Any box constructed or placed in an area accessible by vehicular traffic must have a traffic rated lid.
- Any box 5'x 5' or larger must have a 30"x 30" lockable, stainless steel hinged access hatch constructed directly over the approved steps.
- Approved steps must be installed and accessible from the manhole lid or man hatch. See the following link for requirements and additional information.
<http://www.americanstep.com/manholesteps.html>

PRECAST REQUIREMENTS: All locations required to be grouted must use approved/specified product which include the following:

- Quadex Hyperform
https://www.nassco.org/sites/default/files/manhole-quadex_02.pdf
- CS-1800 Conseal
<http://conseal.com/concrete-sealant-products/cs-1800-solvent-free-waterproofing-membrane.html>

Box types must include the following:

Precast manhole/Junction box

- Grouted and sealed inside and out. (See specified above)
- Approved steps installed 12" from floor to top of box.
- (Manhole) Steel lid marked "Irrigation" w/pick hole.
- (Box) 4lb. raised expanded metal lid.
- Lid to be edged w/ 2" flat stock.
- Secured in all corners with ½"x 4" lag bolts.

Cast in place Junction box:

- Approved steps installed 12" from floor to top of box.
- 4lb. raised expanded metal lid.
- Lid to be edged w/ 2" flat stock.
- Secured in all corners with ½"x 4" lag bolts.

Diversion box:

- Approved steps installed 12" from floor to top of box.
- 2pcs. or access to check slot 4lb. raised expanded metal lid.
- Lid to be edged w/ 2" flat stock.
- Secured in all corners with ½"x 4" lag bolts.
- 2"x 2" check board slot formed into box.
- Waterman C10 gate or equivalent sealed to wall w/ Vulkem 116.
<https://www.tremcosealants.com/products/vulkem-116.aspx>
- Must be RCP to gauging box.
- If precast, see requirements above.

Weir box:

- Approved steps installed 12" from floor to top of box.
- 4lb. raised expanded metal lid.
- Lid to be edged w/ 2" flat stock.
- Secured in all corners with ½"x 4" lag bolts.
- Weir/check slots formed into box.
- Approved Cipoletti weir, construct of ¼ plate steel.
- Stevens staff gage (style C) mounted flush with weir crest 18-24" upstream.
- If precast, see requirements above.

Ponds: Adequate lined gravity irrigation ponds are highly recommended for all subdivisions with surface water rights to supply any pressurized irrigation pump station being constructed. For more information regarding ponds, please reference the pressurized irrigation spec sheet on our website.

Easements: Easements exist at any location surface water is present whether it is recorded or prescriptive. Irrigation easement dimensions are defined as whatever the operating agency requires to maintain said facility.

- **Encroachments:** Encroachments within Settlers Irrigation District easements are prohibited unless approved in writing by the District.
<https://legislature.idaho.gov/statutesrules/idstat/title42/t42ch12/sect42-1209/>: Any encroachments which are approved must be approved via a License Agreement. Please see above as to the license agreement process.

- **Vacation of easement/Relocation:** Any vacation of an easement must be approved by the governing agency. A legal description of the vacated easement and new location must be provided and included into the License Agreement to be recorded. The District will require a new easement to be granted as part of the License Agreement process and it is up to the developer/engineer to provide the legal description for the new easement which must include a metes and bounds description as well as an exhibit showing the new easement locations.

CONTRACTORS: All contractors performing construction to any Settlers Irrigation District facilities must be licensed, insured and bonded.

INSPECTIONS: The developer/contractor is required to coordinate all construction with Settlers Irrigation District. A minimum 24hr. request for inspection is required. Inspections will only occur during normal business hours of operations. Mon-Fri. 7am-3pm.