# Mapleton Irrigation District & Company

Application Packet

Guide for Application, Review, and Approval Process with Mapleton Irrigation District & Company For Encroachment upon Easements & Facilities

#### Mapleton Irrigation District & Company General Instructions

This packet is intended to assist Applicants in working with Mapleton Irrigation District & Company (MIDC). All Applicants are required to obtain permission from MIDC to do work affecting MIDC facilities. MIDC facilities mainly include irrigation ditches.

Central Utah Water Conservancy District has taken over ownership, including encroachment reviews, on the Springville/Mapleton Lateral. If a project is on this lateral, MIDC will not be involved in the project.

Any desired development that will affect MIDC facilities must go through the Application, Review, and Approval Process. This includes any time that work is done within MIDC easements. Franson Civil Engineers (FCE) is the engineering firm for MIDC. FCE will review all plans that affect MIDC facilities. This review process is in-depth and may be lengthy depending on the quality of the plans submitted for review. The following is a guideline for the Application, Review, and Approval Process affecting MIDC facilities:

- The Applicant uses the guidelines in the application packet to design the affected facilities to MIDC standards.
- FCE receives the **application**, **application fees**, and **drawings**. The review process will not begin until these items have been received.
- FCE will **review** the drawings, including the plat map. A meeting will be held with FCE and MIDC to discuss the development. A redline comment letter will be sent to the Applicant with a checklist of items that must be addressed prior to approval (2-3 weeks for each review). The reviews will repeat as explained above until all items from the checklist have been addressed and plans are to MIDC standards. This typically takes 2-3 reviews. If the standards in the packet are strictly adhered to, and the improvements to the facilities are well designed, the time involved in this review process can be greatly reduced.
- **Bonding** is required by MIDC. When the drawings are acceptable, the Applicant will provide a cost estimate to FCE for the construction of MIDC facilities so the bonding amount can be determined. Once the bonding amount has been determined, reviewed and accepted by MIDC, the Applicant will be notified of the amount. An example of a bond letter, which outlines the bonding requirements, is included in this packet. Once the bonding amount is set, the Applicant should have their bank prepare the bond, using a template provided by FCE.
- **Easements** for MIDC facilities must be recorded with the Utah County Recorder. Easements shall be shown on the Plat Map for the subdivision. A signed statement, from the landowner, stating that the easement will be recorded, must be submitted if the easement has not been recorded at this point in the process. Proof of record for the irrigation easements or the signed statement must be submitted to FCE before the Encroachment Agreement will be prepared. Easements shall be in the name of Mapleton Irrigation District & Company.
- An **Encroachment Agreement** will be prepared between the Applicant and MIDC once all of the above mentioned items have been completed. Three copies of the agreement will

#### Mapleton Irrigation District & Company General Instructions

be sent to the Applicant for signature. The Applicant will then mail or deliver the agreement to the MIDC president for discussion and approval at the next MIDC board meeting.

- A draft of the Encroachment Agreement will be sent to the Applicant for review when the drawing review is completed. The agreement stays the same for most projects, so it can save time by reviewing the example agreement that is included in the Instruction Packet.
- Once the Encroachment Agreement has been signed by the Applicant and MIDC, permission has been granted to the Applicant to begin the construction phase in accordance with the agreement.
- The Applicant is required to notify MIDC and FCE at least 24 hours in advance of beginning construction on irrigation facilities, as outlined in the agreement.
- A representative from MIDC will make occasional 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 FCE and MIDC to identify any final items that need to be completed before work is accepted by MIDC. A **punch list** will be prepared and sent to the Applicant listing items required, as applicable.
- Recording of easement(s) through the Utah County Recorder's Office should be completed (if not already done so) once construction is complete. If construction changes altered where MIDC facilities were installed and the easement was already recorded, an updated easement document will need to be recorded prior to acceptance by MIDC.
- When all these items are complete, MIDC will send a **letter of acceptance** to the Applicant stating the irrigation company facilities are complete.

Enclosed in this packet are:

- Large Subdivisions Application Type 1
- Small Subdivisions (2 Lots) Application Type 2
- City or Utility Crossings (Bore, Overhead, Etc.) Application Type 3
- Ditch Modifications (Homeowner, One Lot) Application Type 4
- Development Design Checklist (assist Applicant in designing plans to MIDC standards)
- Bond Letter Template
- Encroachment Agreement Example

## LARGE SUBDIVISIONS – APPLICATION TYPE 1

Application for Agreement to Encroach and Construct within Mapleton Irrigation District & Company (MIDC) 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):
	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. Also, email a digital plan set to Todd Adams. Plans shall be drawn to MIDC standards. A Design Checklist is available to assist engineers in designing to MIDC standards.
- 6. Attach a check for \$6,000 for the application and review fee. The application fee will be used by MIDC for purposes of administration, coordination, engineer review, preparation of agreements, construction review, legal guidance, and any other expenses it incurs related to this application. If costs incurred by MIDC are greater than the application fee, the Applicant will be responsible to reimburse MIDC for the remainder of the expenses. If costs incurred by MIDC are less than the application fee, a refund will be given back to Applicant, upon written request at the end of the project.

Please make all checks payable to: Mapleton Irrigation District & Company.

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

MIDC Office	801-491-6264	MIDC Office
Clayne Weight	801-420-0218	MIDC Water Master
Todd Adams	801-756-0309	Franson Civil Engineers

## NOTES:

- 1. The MIDC bonding requirements are as follows: Bonding will 110% of the total cost of irrigation facilities. Upon completion of construction, approval by MIDC, 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 MIDC, and pending no problems with the facilities, the remaining 10% of the bond will be released. All bond releases are subject to approval by MIDC.
- 2. Easements for MIDC must be recorded with the Utah County Recorder. The recorded document, or a signed statement stating the easement will be recorded, must be provided to FCE prior to the Encroachment Agreement being released for signatures.
- 3. Starting construction without prior written approval in the form of an Encroachment Agreement from MIDC may 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 MIDC are greater than the application fee, the Applicant will be responsible to reimburse MIDC 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. If costs incurred by MIDC are less than the application fee, a refund will be given back to Applicant, upon written request at the end of the project.
- 5. The review process will not begin until the application fee is paid.
- 6. This application is valid for 6 months from the date it is submitted. The Encroachment Agreement must be signed within this 6 month period. Once the Encroachment Agreement is signed, the Applicant has one year to complete work on irrigation facilities.
- 7. This application cannot be sold to other parties. If the Applicant chooses to sell the property associated with this application, the application is voided and the new 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

## SMALL SUBDIVISIONS (2 LOTS) – APPLICATION TYPE 2

Application for Agreement to Encroach and Construct within Mapleton Irrigation District & Company (MIDC) 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):
	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. Also, email a digital plan set to Todd Adams. Plans shall be drawn to MIDC standards. A Design Checklist is available to assist engineers in designing to MIDC standards.
- 6. Attach a check for \$3,500 for the application and review fee. The application fee will be used by MIDC for purposes of administration, coordination, engineer review, preparation of agreements, construction review, legal guidance, and any other expenses it incurs related to this application. If costs incurred by MIDC are greater than the application fee, the Applicant will be responsible to reimburse MIDC for the remainder of the expenses. If costs incurred by MIDC are less than the application fee, a refund will be given back to Applicant, upon written request at the end of the project.

Please make all checks payable to: Mapleton Irrigation District & Company.

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

MIDC Office	801-491-6264	MIDC Office
Clayne Weight	801-420-0218	MIDC Water Master
Todd Adams	801-756-0309	Franson Civil Engineers

## NOTES:

- 1. The MIDC bonding requirements are as follows: Bonding will 110% of the total cost of irrigation facilities. Upon completion of construction, approval by MIDC, 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 MIDC, and pending no problems with the facilities, the remaining 10% of the bond will be released. All bond releases are subject to approval by MIDC.
- 2. Easements for MIDC must be recorded with the Utah County Recorder. The recorded document, or a signed statement stating the easement will be recorded, must be provided to FCE prior to the Encroachment Agreement being released for signatures.
- 3. Starting construction without prior written approval in the form of an Encroachment Agreement from MIDC may 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 MIDC are greater than the application fee, the Applicant will be responsible to reimburse MIDC 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. If costs incurred by MIDC are less than the application fee, a refund will be given back to Applicant, upon written request at the end of the project.
- 5. The review process will not begin until the application fee is paid.
- 6. This application is valid for 6 months from the date it is submitted. The Encroachment Agreement must be signed within this 6 month period. Once the Encroachment Agreement is signed, the Applicant has one year to complete work on irrigation facilities.
- 7. This application cannot be sold to other parties. If the Applicant chooses to sell the property associated with this application, the application is voided and the new 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

#### CITY OR UTILITY CROSSINGS (BORE, OVERHEAD, ETC.) - APPLICATION TYPE 3

Application for Agreement to Encroach and Construct within Mapleton Irrigation District & Company (MIDC) 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):
	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. Also, email a digital plan set to Todd Adams. Plans shall be drawn to MIDC standards. A Design Checklist is available to assist engineers in designing to MIDC standards.
- 6. Attach a check for \$3,000 for the application and review fee. The application fee will be used by MIDC for purposes of administration, coordination, engineer review, preparation of agreements, construction review, legal guidance, and any other expenses it incurs related to this application. If costs incurred by MIDC are greater than the application fee, the Applicant will be responsible to reimburse MIDC for the remainder of the expenses. If costs incurred by MIDC are less than the application fee, a refund will be given back to Applicant, upon written request at the end of the project.

Please make all checks payable to: Mapleton Irrigation District & Company.

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

MIDC Office	801-491-6264	MIDC Office
Clayne Weight	801-420-0218	MIDC Water Master
Todd Adams	801-756-0309	Franson Civil Engineers

## NOTES:

- 1. The MIDC bonding requirements are as follows: Bonding will 110% of the total cost of irrigation facilities. Upon completion of construction, approval by MIDC, 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 MIDC, and pending no problems with the facilities, the remaining 10% of the bond will be released. All bond releases are subject to approval by MIDC.
- 2. Easements for MIDC must be recorded with the Utah County Recorder. The recorded document, or a signed statement stating the easement will be recorded, must be provided to FCE prior to the Encroachment Agreement being released for signatures.
- 3. Starting construction without prior written approval in the form of an Encroachment Agreement from MIDC may 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 MIDC are greater than the application fee, the Applicant will be responsible to reimburse MIDC 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. If costs incurred by MIDC are less than the application fee, a refund will be given back to Applicant, upon written request at the end of the project.
- 5. The review process will not begin until the application fee is paid.
- 6. This application is valid for 6 months from the date it is submitted. The Encroachment Agreement must be signed within this 6 month period. Once the Encroachment Agreement is signed, the Applicant has one year to complete work on irrigation facilities.
- 7. This application cannot be sold to other parties. If the Applicant chooses to sell the property associated with this application, the application is voided and the new 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

## DITCH MODIFICATIONS (HOMEOWNER, ONE LOT) – APPLICATION TYPE 4

Application for Agreement to Encroach and Construct within Mapleton Irrigation District & Company (MIDC) 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):
	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. Also, email a digital plan set to Todd Adams. Plans shall be drawn to MIDC standards. A Design Checklist is available to assist engineers in designing to MIDC standards.
- 6. Attach a check for \$2,000 for the application and review fee. The application fee will be used by MIDC for purposes of administration, coordination, engineer review, preparation of agreements, construction review, legal guidance, and any other expenses it incurs related to this application. If costs incurred by MIDC are greater than the application fee, the Applicant will be responsible to reimburse MIDC for the remainder of the expenses. If costs incurred by MIDC are less than the application fee, a refund will be given back to Applicant, upon written request at the end of the project.

Please make all checks payable to: Mapleton Irrigation District & Company.

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

MIDC Office	801-491-6264	MIDC Office
Clayne Weight	801-420-0218	MIDC Water Master
Todd Adams	801-756-0309	Franson Civil Engineers

## NOTES:

- 1. The MIDC bonding requirements are as follows: Bonding will 110% of the total cost of irrigation facilities. Upon completion of construction, approval by MIDC, 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 MIDC, and pending no problems with the facilities, the remaining 10% of the bond will be released. All bond releases are subject to approval by MIDC.
- 2. Easements for MIDC must be recorded with the Utah County Recorder. The recorded document, or a signed statement stating the easement will be recorded, must be provided to FCE prior to the Encroachment Agreement being released for signatures.
- 3. Starting construction without prior written approval in the form of an Encroachment Agreement from MIDC may 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 MIDC are greater than the application fee, the Applicant will be responsible to reimburse MIDC 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. If costs incurred by MIDC are less than the application fee, a refund will be given back to Applicant, upon written request at the end of the project.
- 5. The review process will not begin until the application fee is paid.
- 6. This application is valid for 6 months from the date it is submitted. The Encroachment Agreement must be signed within this 6 month period. Once the Encroachment Agreement is signed, the Applicant has one year to complete work on irrigation facilities.
- 7. This application cannot be sold to other parties. If the Applicant chooses to sell the property associated with this application, the application is voided and the new 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

Engineer:	
Date:	

# **DEVELOPMENT DESIGN CHECKLIST**

This checklist is intended to assist engineers in designing projects to Mapleton Irrigation District & Company (MIDC) standards. All projects seeking acceptance by MIDC 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.

Neither MIDC nor Franson Civil Engineers (FCE) will have responsibility for design or construction of Applicant's facilities. It is the responsibility of the Applicant and their engineer to design the project to MIDC standards. No approval or acquiescence by MIDC or FCE will operate as a waiver or modification of MIDC standards.

MIDC Typical Drawings (Typical Drawings) are available for reference and are to be used as design examples. Typical Drawings, being design examples, do not represent an actual site specific design and are not to be directly included in the project plans. Final development drawings must be designed and prepared by a licensed professional engineer.

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

Note: This checklist is updated when standards are amended. Checking for the latest version of this checklist at <u>www.fransoncivil.com/MIDC</u> will ensure the most up-to-date information. MIDC reserves the right to make exceptions to the standards or impose other requirements, dependent upon the Applicant's project.

#### GENERAL

- □ 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.
- □ Show all existing irrigation ditches affected by the development.
- □ Show new location of all ditches. All open channel ditches must be piped.
- □ Submit Plat Map; all Mapleton Irrigation District and Company (MIDC) facilities must have recorded easements (see Easements section).
- $\Box$  All streets are labeled properly.
- □ All concrete used in construction shall have a minimum compressive strength of 4,000 psi. The concrete mix shall include between 5% and 7% air entrainment.
- □ Apply Swellstop, Waterstop RX, or MIDC Engineer approved equivalent to all concrete cold joints to prevent water seepage.
- □ Before submitting drawings to FCE, please review and verify that all notes, references, and labels are correct and accurate.

- □ Bonding is required on all MIDC facility improvements. After drawings have been deemed acceptable by FCE, please submit a detailed cost estimate of construction (materials and labor) of MIDC facilities. Once this has been checked, the bond amount will be set.
- □ Notes to be added to the drawing set under heading "Mapleton Irrigation District & Company Notes:"
  - Applicant must notify Franson Civil Engineers (FCE) at least 24 hours before construction on MIDC facilities. Call Todd Adams with FCE at 801-756-0309. Failure to do so may result in a \$5,000 fine.
  - All construction must be done to MIDC standards.
  - o MIDC contact during construction: Clayne Weight, Water Master, 801-420-0218.

#### PIPES

- □ MIDC standards require 24-inch or 30-inch reinforced concrete pipe (RCP). Fused high density polyethylene (HDPE) is also acceptable in some instances.
- □ All pipes on all drawings must be specifically labeled for pipe type and size (i.e. 24-inch RCP). If proposed pipe is fused HDPE, specify inside diameter, pressure rating, etc. HDPE pipe requires a minimum <sup>3</sup>/<sub>4</sub>-inch wall thickness.
- □ Any pipe replacing a ditch shall have a minimum inside diameter of 24 inches.
- □ All pipe sizes must be designed to carry sufficient flow for irrigation demands. Coordinate with FCE for flow requirements before beginning design of irrigation facilities.
- □ Plan and profile view of each pipe is required.
- □ Under roadways trench detail is required showing bedding detail. MIDC standards require bedding 6 inches below pipe and 6 inches above, using a minimum of <sup>3</sup>/<sub>4</sub>-inch clean crushed rock unless specified otherwise by manufacturer.
- □ Yards, fields, etc. trench detail is required showing bedding detail. MIDC standards require bedding 6 inches below pipe up to the springline, using a minimum of <sup>3</sup>/<sub>4</sub>-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.
- □ All backfill materials shall be compacted to a minimum of 95% standard Proctor density.
- □ Irrigation cleanout boxes are required every 500 feet, minimum, 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 irrigation pipe.
- □ Pipes crossing perpendicularly over or under the irrigation pipe shall have a minimum 1 foot vertical clearance.

#### **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.
- $\Box$  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 are required on all improvements.
- $\Box$  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.
- □ 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.
- □ Boxes shall have metal sign attached to grate that reads:

Property of Mapleton Irrigation District & Company

Irrigation Box May Not Be Fenced Within Property

Company Must Have Access From City Street

#### 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:
  - Spacing details: 4-inch spacing for most inlets, 8-inch spacing for pipes over 36 inches in size.
  - Slope 2:1 (H:V) or flatter.
  - Mounting details.

- □ If transitioning to or from a soil-lined ditch, the detail should show riprap appropriately designed to protect the structure:
  - Riprap sized for velocities.
  - Appropriate length and location for riprap.

## EASEMENTS

- □ Easements are required to be recorded with the Utah County Recorder for all MIDC facilities:
  - Plat Maps are best to have these easements recorded.
  - If the plat has already been recorded, the owner can grant the easement with a legal description and have this recorded.
  - Proof of the record must be submitted to FCE.
- □ Easements are 20-feet wide minimum, centered over the pipe. Ditch easements shall be in the name of the Mapleton Irrigation District and Company.
- $\Box$  Notes to be added to the Plat Map:
  - No trees or shrubs in irrigation company easements.
  - o No telephone boxes or power boxes in irrigation company easements.
  - Fences disturbed during construction activities must be replaced and returned to pre-construction condition, or better.
  - Irrigation boxes may not be fenced in yards. Direct access (not through fences) must be provided to Mapleton Irrigation District & Company from city streets.