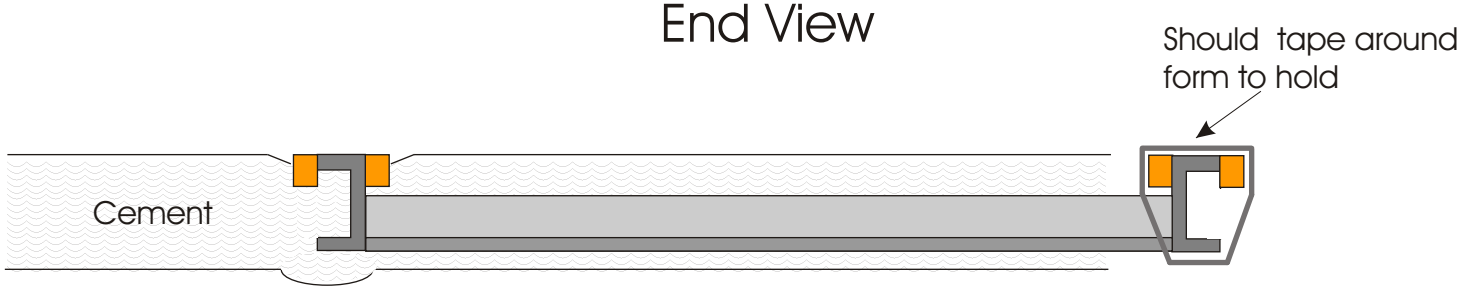
Diagram for Laying Track in Cement

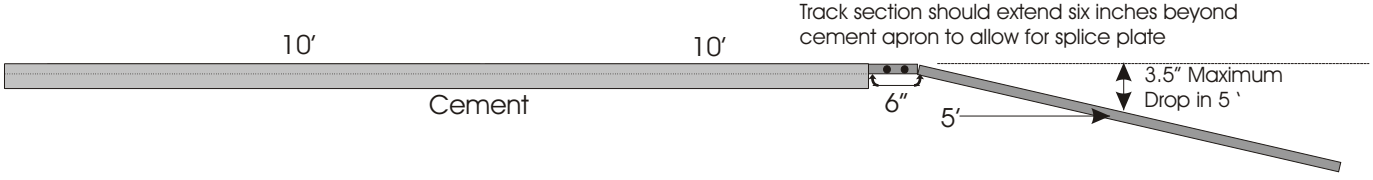
Top View

- Sheet Metal, 3" x 3" stapled to boards
- Boards 3/4" x 1" deep
- Cross Brace 1.75" x 1.75" Angle Iron Flush with Bottom of Track
- Channel Steel 1" Wide x 3" Deep; rails are 5' apart outside edge to outside edge

End View



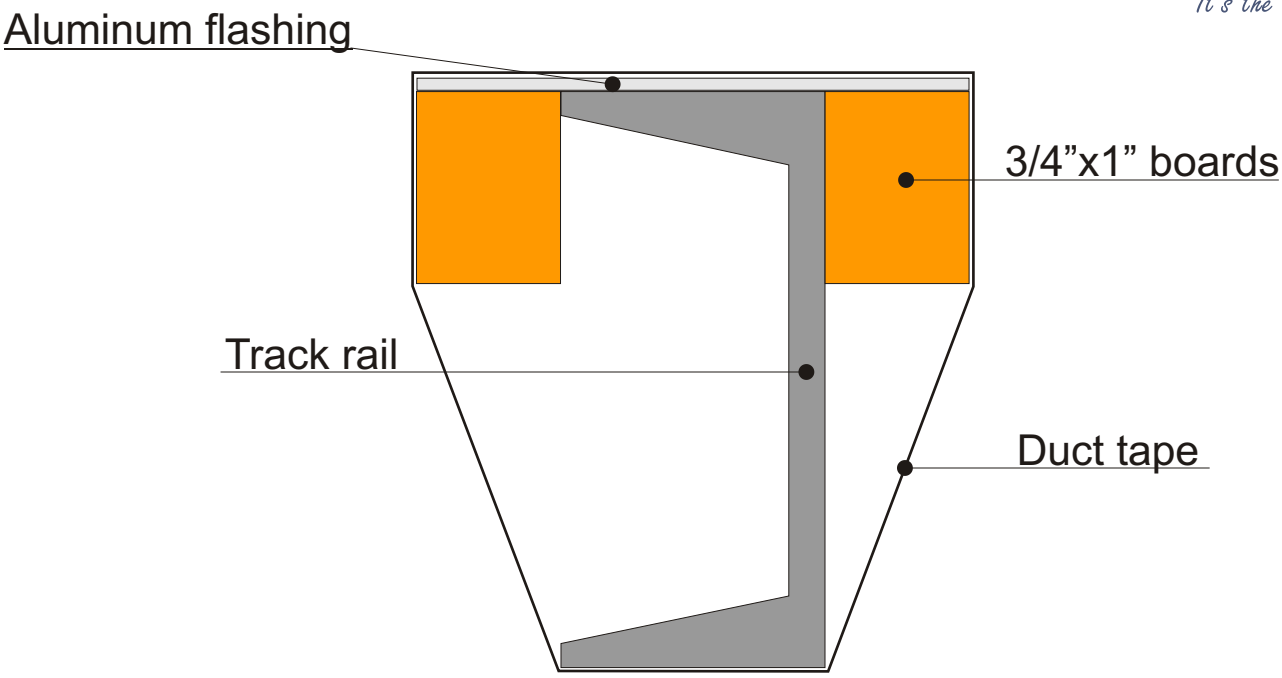
Inside Side View



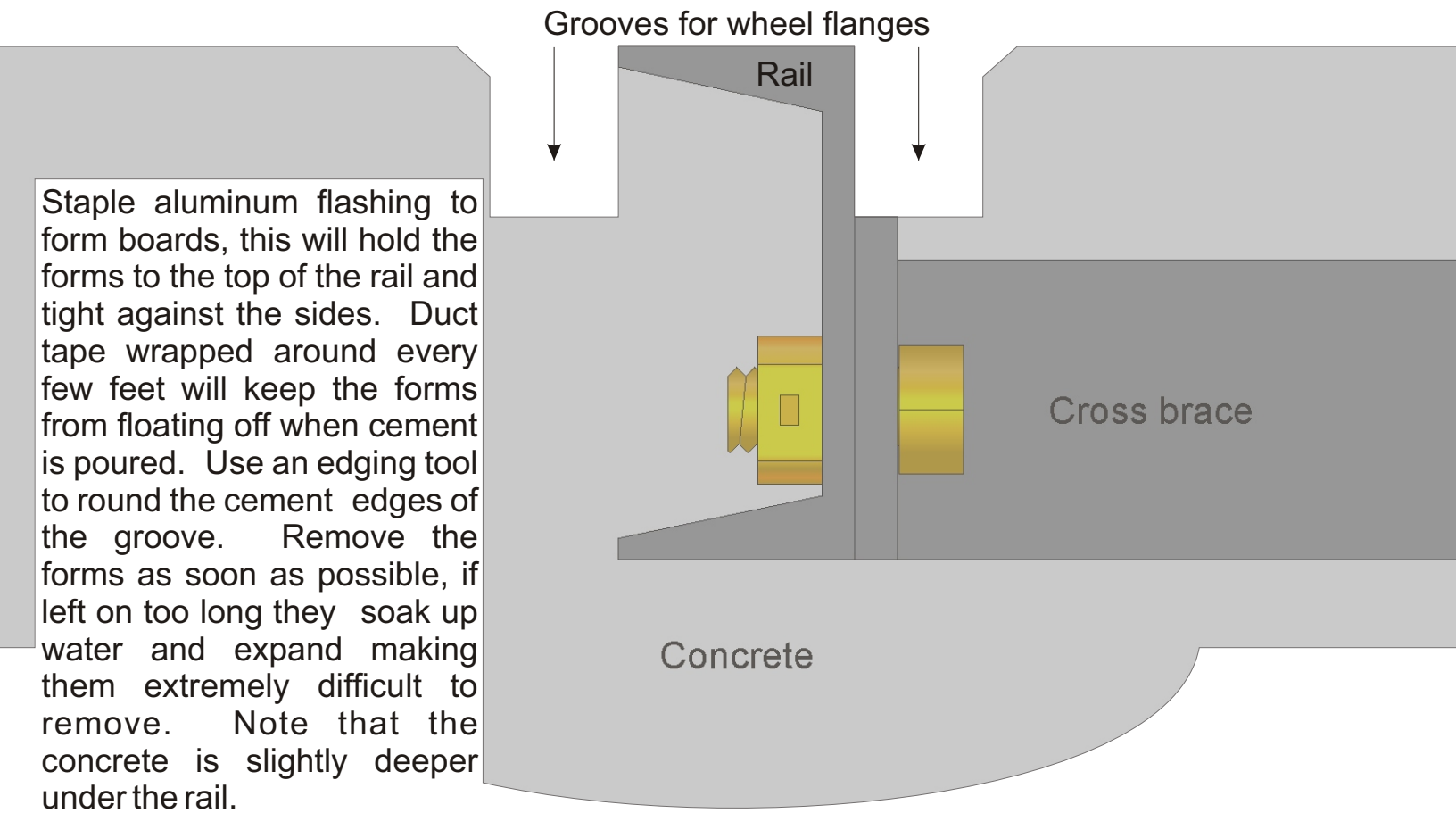
When track is in cement, the maximum drop for the first section outside the door is 3.5 inches in 5 feet. This prevents the carriage from scraping the cement as it leaves the building.

End View of Rail

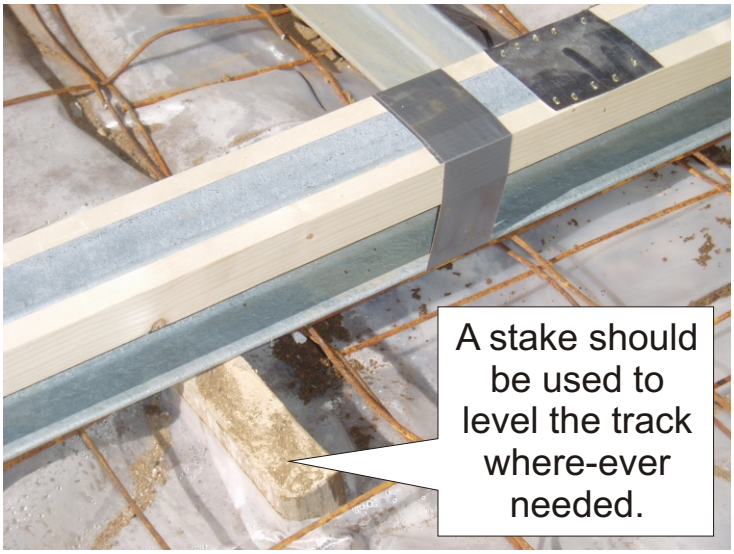
(Showing form boards)



Finished

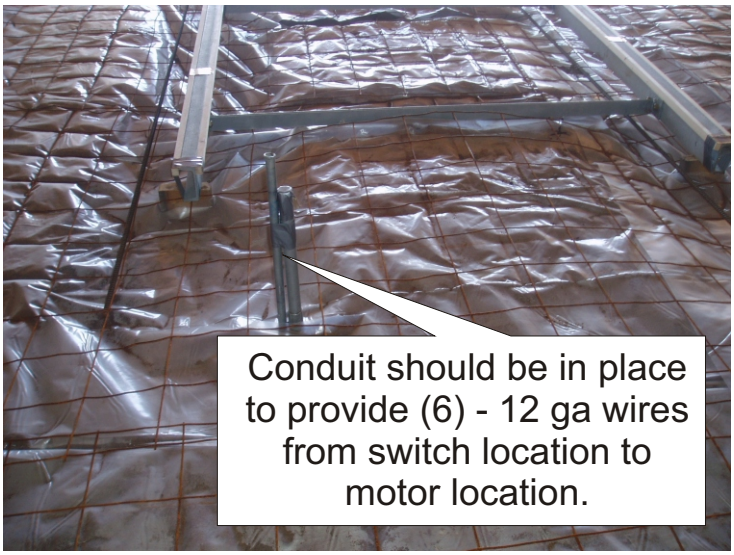


Staple aluminum flashing to form boards, this will hold the forms to the top of the rail and tight against the sides. Duct tape wrapped around every few feet will keep the forms from floating off when cement is poured. Use an edging tool to round the cement edges of the groove. Remove the forms as soon as possible, if left on too long they soak up water and expand making them extremely difficult to remove. Note that the concrete is slightly deeper under the rail.

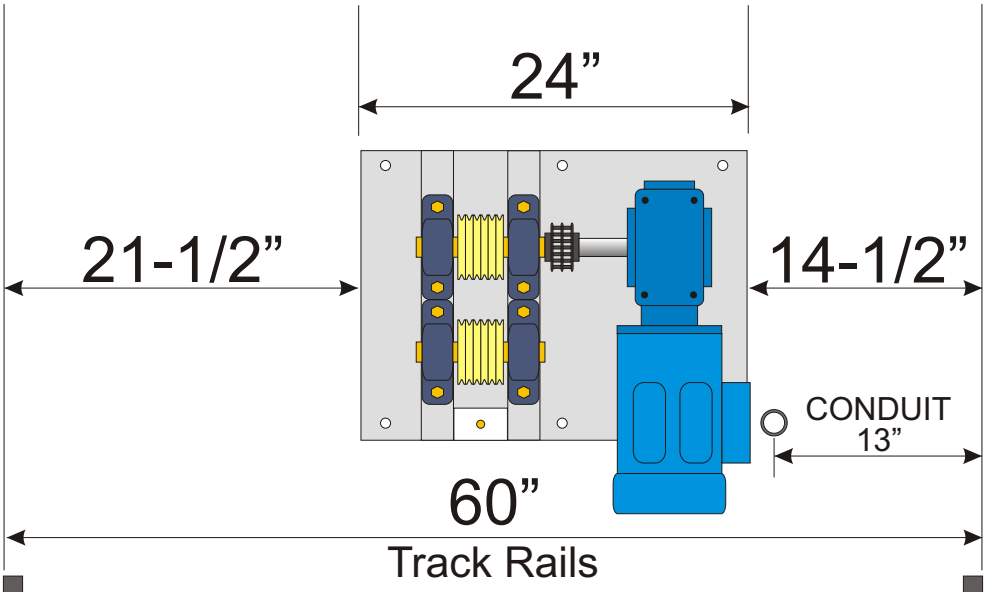

A stake should be used to level the track where-ever needed.


Notice that dirt has been removed from under the rail to add cement underneath the rails for support.


Six (6) inches of rail **MUST** extend past concrete to allow connection to rest of the rail.


Conduit should be in place to provide (6) - 12 ga wires from switch location to motor location.


The track rails can be used to screed the cement level.

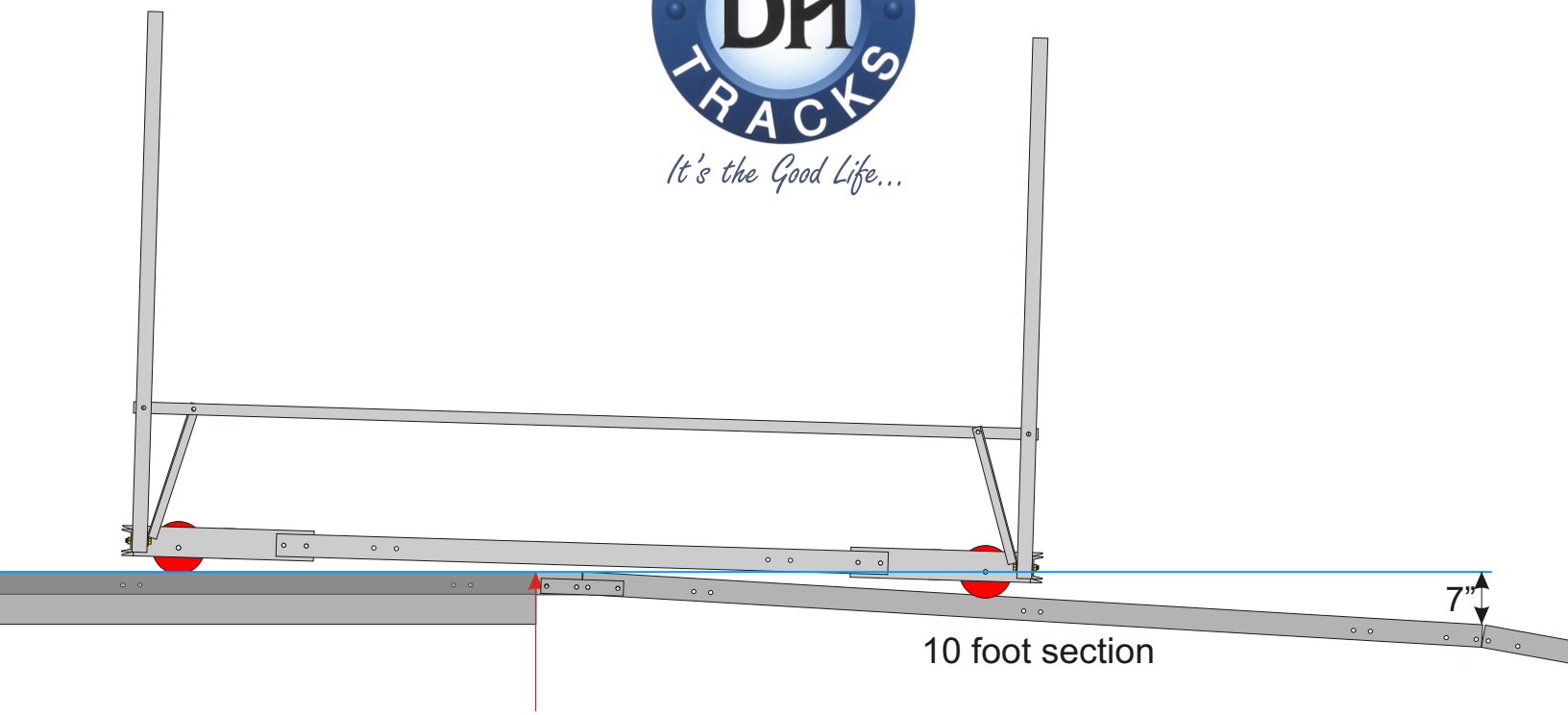


Winch Placement

When the track is laid in concrete, the winch is mounted independently, using six 1/2” x 3-1/2” cement anchors. The winch can be mounted as far back from the end of the rails as desired. Be sure to figure in this distance when ordering cable.

Electricity to the motor can be supplied through conduit under the slab. Conduit sufficient to hold six 12 gauge wires will need to be run from the forward/reverse switch location to the point shown above. The conduit should stick out of the floor far enough to attach a length of flex conduit for final connection to the motor.

Position the winch as shown above and drill a 1/2” hole in the floor through one of the holes in the plate. Place shims (3/4” nuts) between winch plate and cement floor. Use flat washers if needed to accommodate uneven floors. Insert an anchor bolt to hold the plate in position (anchor bolts must go through shims). Drill remaining holes, using plate as a guide. Install all anchors with 1/2” nuts and flat washers on the stud before driving the pin (nail). Use caution when driving in the pins, as they are brittle and may snap off if not hit squarely. The head of the pin should seat against the stud. Check the nuts on the anchors to ensure tightness.



The first section out the cement slab can only drop 7 inches in 10 feet or 3-1/2 inches in 5 feet. This is to prevent the carriage from dragging on the edge of the slab as it makes it’s descent. If 10 feet out is too far to begin descending into the lake, a 5 foot section can be used. This will allow a more rapid descent closer to the doorway. Keep in mind; the maximum descent is 2 feet for every 10 feet of track.