

## WOODLAND SCENICS®

### SMILEY'S TOW SERVICE S130

This kit is probably different than any you have previously constructed. It is not simply a model of a single item, but a model of a Complete Scene. The kit includes the most realistic landscaping materials and techniques available today, and all of the miscellaneous small items that add so much to realism.

We recommend following the instructions and hope they will help you develop techniques that will be valid to you elsewhere. The most ignored instruction is probably "Read entire instructions before beginning." We have divided instructions into separate sections to make this easier.

We are not suggesting that the only "correct" way to build this scene is the way we did it. We recommend doing creative modifications (especially in painting and final assembly steps), because it personalizes your efforts and is more rewarding. A thorough understanding of our instructions may help you with your modifications.

Should you find any defective parts in this kit simply return them to WOODLAND SCENICS for replacement.

### SMILEY'S TOW SERVICE S130 KIT COMPONENTS

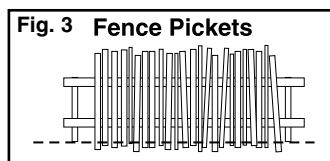
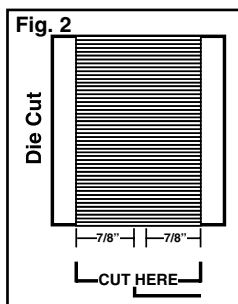
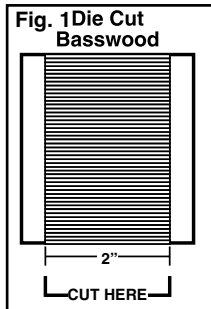
Instructions	Dark green foliage
Plan drawing with template	Undergrowth foliage (brownish)
Separate template drawing	Bundle of 2 3/4" basswood strips
Soil turf material	6 die cut basswood sheets
Earth turf material	Printed and scribed basswood
Yellow grass turf material	Printed Smiley's sign
Burnt grass coarse turf material	Printed card stock for roof
Burnt grass turf material	Black, die cut, paper for roofing
Medium green foliage	

#### CASTINGS

7 trees	2 trailer wheels	Car hood
Man	2 jack stands	Chimney
Door	2 small fuel tank stands	Ladder
Water pump	2 large fuel tank stands	Mail box
Wheelbarrow tub	10 tires	Junk pile
Wheelbarrow base	15 concrete blocks	Stack of firewood
Window	9 barrels	Large fuel tank
Street light	13 pieces assorted junk	Small fuel tank
Snow plow	Printed cardstock (Foundation)	

### FENCE CONSTRUCTION (Read entire instruction before beginning)

- Using one of the 1/32" thick basswood pieces that is cut into 1/16" strips, cut off ends (Fig. 1). Use straight edge and X-acto or single edge razor blade. Carefully cut at end of scores using several light strokes per cut.
- The 1/32" x 1/16" x 2" pieces will fall apart, if some don't roll them between your fingers until they do.
- Tape plan view sheet (with fence templates printed on it) to flat surface.
- Carefully align 1/32" x 1/16" x 2" pieces of fence rail on one fence template (be certain to stagger joints as indicated on template.) Tape in position on template, do not allow tape to cover posts on template.
- Using 3/64" x 3/64" basswood strips, cut posts to length indicated on template.
- Align fence posts as indicated on template and glue to railings at railing joints. Allow to dry.
- Repeat steps 4-6 for other four fence sections.
- Cut 5 remaining 1/32" thick basswood pieces (Fig. 2) into 7/8" pickets.
- Remove fences from templates, turn over and glue pickets on rails in a random fashion. After dry, carefully trim bottom of pickets (Fig. 3).



### TREE CONSTRUCTION

(Read all instructions before beginning)

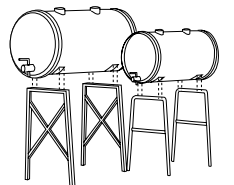
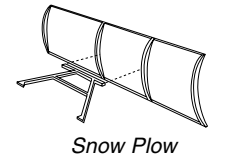
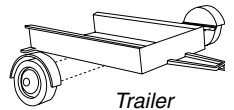
- Tree trunks are soft metal castings. They may have some flash. If so scrape it off.
- Wash trees gently in soapy water.
- Bend tree to a realistic three-dimensional shape (you may want to break off some branches to vary tree, or even break tree in half to make two smaller ones.)
- Brush or spray paint trunks with any flat lacquer or enamel paint. Most trees are gray with only hints of brown.
- If desired for more realism a second lighter or darker color can be applied, using a dry brush or wash technique (we prefer a latex or water base paint.) **NOTE:** When handling foliage some "leaves" will fall off. Work on a clean bench so you can save "leaves" for later.
- There are two pieces of green foliage material in the kit (dark green and medium green).  
cut 2 pieces in half = 4 pieces  
cut 4 pieces in half = 8 pieces  
cut 8 pieces in half = 16 pieces  
cut 16 pieces in half = 32 pieces
- Set eight dark green and four medium green pieces aside for later.
- Make four stacks of two pieces of foliage (like color together). These eight stacks of foliage are for the eight trees. **NOTE:** The trees are different sizes. It is impossible to exactly measure the correct amount of foliage for any given tree, however the above stacks will be very close. **IMPORTANT:** You can see through most real trees. See photo of finished tree.
- Select one stack of three pieces of foliage and S-T-R-E-T-C-H foliage pieces to about twice their present volume. Make foliage more see-through and three-dimensional in quality. S-T-R-E-T-C-H until they pull completely apart. The number of pieces you have is no longer important: the volume of see-through foliage is.
- Select the largest bent and painted tree and arrange the stretched foliage on the tree, retaining the see-through quality of the foliage. Re-arrange until you are satisfied (see tree photo). You can use a small amount of foliage from batch set aside in step 7, but do this only if absolutely necessary.
- Spray foliage with clear spray (hair-spray, lacquer or varnish) to "set".



### PREPARATION OF CASTINGS

(Read all instructions before beginning)

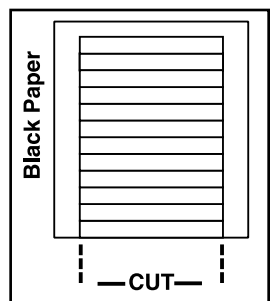
- All castings are metal and may have some flash and sprues, remove and clean up to suit.
- Gently wash castings in soapy water.
- We recommend painting all castings with a thin primer coat of lacquer or flat enamel. (We prefer Floquil because it adheres well and accepts most other paints. A Cyano Acrylic type glue, such as Hot Stuff, works well on metal.)
- Glue trailer together as indicated in drawing.
- Glue snow plow together as indicated in drawing.
- Glue wheelbarrow together as indicated in drawing.
- Glue large and small fuel tanks together as indicated in drawing. black (more about weathering later).



Large and Small Fuel Tanks

### SUB ASSEMBLIES (Read all instructions before beginning)

- Black paper in kit is for roofing. Cut off ends of paper as indicated in drawing. You will be left with 5/16" roofing strips.
- Using straight edge and sharp X-acto or single edge razor blade, carefully cut out roof panel A from white card stock.
- On roof panel A, align edge of a roofing strip with the line above the number one, so each end of roofing strip overlaps edges of panel A. Secure with white glue.
- Align the second roofing strip with line above the number two. It should overlap the first roofing strip about 1/16" and overlap edges of roof panel. Secure with glue.
- Align third roofing strip with line above number 3, in the overlapping position and glue.
- Align fourth roofing strip with the line above number 4, in the overlapping position and glue. Some white card stock will still show!
- Place panel under weight to avoid warping while the glue dries.



8. Repeat steps 2 through 7 on roof panel B.
9. Repeat steps 2 through 4 only on side roof and porch roof.
10. Place a third roofing strip on side roof and porch roof, in a position that exposes as much of strip 2 as is exposed of strip 1. Place under weight while glue dries.
11. When roof panels thoroughly dry, trim overhanging roofing strips flush with roof panels.
12. Fold a roofing strip for roof ridge in half the long way as indicated in exploded view. This is easier if you lightly score strip at fold point before folding, or if you fold over a sharp corner.
13. Using some of the 1/32" x 1/16" x 2" basswood pieces (from step 2 under fence construction) cut 11 porch decking boards as indicated on porch template.

Make two porch beams by cutting one piece of 2 3/4" x 3/64" x 3/64" basswood strip in half as indicated on porch template and tape to template at ends only.

Glue decking boards to porch beams as indicated on porch template. Allow to dry and cut beams off at edge of decking.

14. Using 3/64" x 3/64" basswood strips make a sign post, light post, porch post assembly and side roof post assembly. (As indicated on template.)  
Glue light fixture to light post. (As indicated on template.)

Cut out the two signs, glue them back to back, place under weight until dry, and glue sign to sign post. (As indicated on template.)

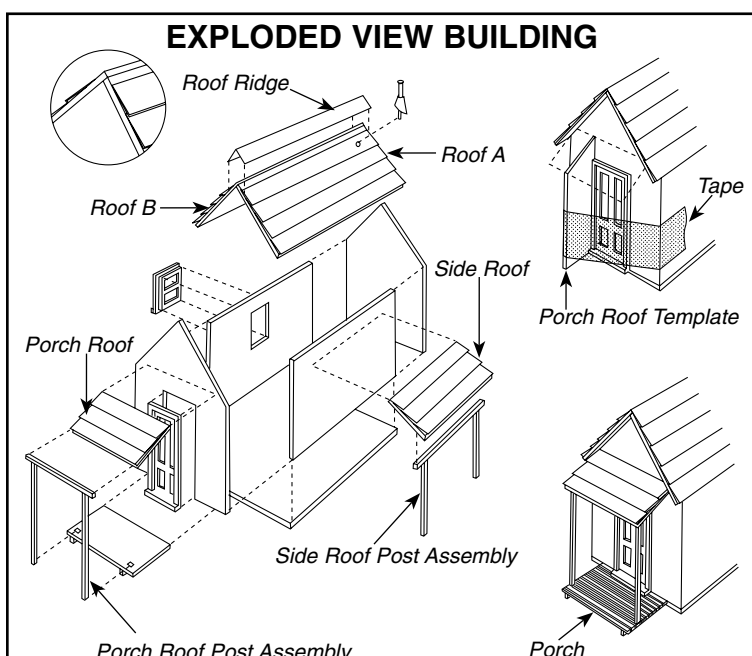
15. Cut out porch roof template and building foundation from printed card stock, with a straight edge and X-acto or single edge razor blade.

Glue building foundation to remaining card stock and place under weight until dry. Then cut around building foundation to remove excess card stock (this makes building foundation twice as thick, as required.)

### ASSEMBLY OF BUILDING (Read all instructions before beginning)

**NOTE:** You may wish to paint all building components, before assembly, to get cleaner color separations. It will of course work to paint after assembly.

1. Using straight edge and sharp X-acto or single edge razor blade, use several light strokes to cut building sides (B1, B2, B3, and B4) from scored basswood sheeting.  
**NOTE:** Lay straight edge over building panel and hold firmly, then if blade slips away from straight edge it will not damage building.  
**ANOTHER NOTE:** It is best to make cross grain cuts (perpendicular to scores) first, then wood is less likely to split, especially when cutting door and window opening. Should you split wood, simply glue it back together.
2. Glue cast door in opening on basswood, be certain that bottom of door is flush with bottom of building! Make opening larger or file off bottom of door, if necessary.
3. Use white glue to assemble the building sides. Be certain that end walls overlap side walls, and that window opening is closer to top of building than bottom. (See exploded view). Wipe off any excess glue on outside surface of walls.
4. Glue window in window opening with window sill at bottom of opening.
5. Glue walls to building foundation. If building walls bow in or out, align them with edge of foundation to straighten out.
6. Glue roof panel A (one with least amount of white card stock showing) in place with an equal amount of overhang on front and rear, and with top edge of roof panel flush with peaks on front and rear.
7. Glue roof panel B on building, so that the exposed white card stock overlaps top edge of roof panel A.
8. Glue folded ridge roofing to ridge of roof. It will cover white card stock.
9. Carefully drill 1/16" hole in roof to receive chimney. Glue chimney to roof.
10. Place long edge of porch roof template next to door, with bottom of template flush with bottom of foundation. Tape in position as shown in drawing.
11. Locate porch roof so that it rests on template (to establish roof angle), is horizontal and centered over door. (See drawing.) Glue edge of roof to building, allow to dry thoroughly and remove template.



12. Glue edge of porch to foundation. (See exploded view.) Allow to dry.
13. Glue porch post to porch and roof as shown in exploded view.
14. Cut porch roof template on dotted line to make it shorter. Repeating procedures in step 10 and 11, glue side roof on building.
15. Glue side roof post assembly to side roof as indicated in exploded view.  
**NOTE:** Side roof posts are very fragile when glued to roof. You may wish to glue posts in place after building is glued to scene. You can then add posts by wedging between ground and roof as was done with porch posts.

### APPLICATION BASE TURF (Read all instructions before beginning)

1. Locate plan and template drawing, carefully cut around plan portion at fence line, SAVE plan and locator template.
2. Lay the plan on your layout or mounting board in the exact location desired. Lay the template around the plan and secure template to layout with tape or pins. Remove the plan.
3. If the area within the template is a glossy or slick surface, lightly sand. If it is grass mat remove mat within template area and sand.
4. Use varnish or white glue mix (white glue mix is prepared by diluting white glue 10-20% with water and adding a few drops of liquid detergent.) Brush varnish or white glue mix on entire area (7" x 9") within template. Sprinkle the earth colored turf material into wet glue or varnish. Apply enough turf to completely cover varnish or glue. A flour sifter or tea strainer may be useful as an applicator. However, this is not mandatory. Allow to dry thoroughly.
5. Brush (with a soft brush) or gently blow the excess turf material, that doesn't stick, onto a piece of paper and save it. **NOTE:** If the base earth turf didn't cover the mounting board you can easily add to it using the following clear spray technique. **ACCENTING TURF COLOR** is very important for realism. In nature the earth and grass areas are seldom one solid color. There will usually be color variations due to burnt out grass, dead grass, leaves and soil conditions. These color changes tend to occur at random or because of some specific influence on the ground (such as a worn area, from traffic or working, where grass doesn't grow).
6. Grass areas are indicated on the plan drawing by a dot pattern. Spray a moderately wet coat of clear spray (hair spray, lacquer or varnish) on the grass areas indicated and sprinkle the green turf material onto wet clear spray, in a salt and pepper fashion. Blend or feather green into edges of earth by applying less and less of the green turf. This will leave the earth color emphasized in the work area.
7. Use the clear spray technique and very lightly at random sprinkle yellow turf material over the green and brown areas.
8. Repeat step 7 using the dark soil color.
9. If there is too much of a color in a given area, use the clear spray technique and lightly salt and pepper the opposite color on that area.  
**NOTE:** Since variations in turf are random in nature there is no exactly correct appearance for turf, but with the above procedure you can make turf look the way you want it to.
10. When turf has desired blend of colors lightly spray with clear spray to further secure.

### ASSEMBLY OF SCENE (Read all instructions before beginning)

1. Remove the template from layout and hold the 9" piece of fencing across back edge of turf area, with posts to inside of scene. Mark where longer posts touch ground and drill 1/16" holes at these points.
2. Gently and evenly insert longer posts on 9" piece of fence into holes until bottom of fence touches ground. Secure with white glue.
3. Hold one 7" fence section on side edge of turf area with posts to inside of scene so that fence rails on 7" piece overlap corner post on 9" piece of fence. Mark location of longer fence posts, drill holes, insert fence and secure with glue.
4. Repeat step 3 on other 7" side of turf area.
5. Locate 2 1/2" piece of fence as indicated in plan view, with rails on 7" fence overlapping corner post on 2 1/2" fence, drill, insert and glue.
6. Repeat step 5, mounting 4 3/4" piece of fencing in location indicated on plan view.
7. Locate building on scene, as indicated in plan drawing and secure with white glue. Be sure to keep roof posts vertical.
8. Locate the following items on scene, as indicated on plan drawing: large fuel tank mounted on concrete pad, small fuel tank, tires, concrete blocks, water pump, barrels, firewood, ladder, wheelbarrow, trailer, snow plow, jack stands and all other miscellaneous castings. Re-arrange castings until you are satisfied and secure with white glue.

### FINAL NOTE

If scene contrasts too much with surrounding ground it can be blended in from the fence outward, using the remaining turf and the Scenic Cement, or diluted white glue technique.

A complete line of Trees, Foliage, Turf, Flowers, Stumps, Ballast and Coal are available from WOODLAND SCENICS. Try them on your layout.



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