```
w-pred_wf  THM

⊢  ∀the_w:World, e:E. ¬first(e) ⇒ pred(e) ∈ E
  by Auto
     THEN
     Inst
     Thm* ∀the_w:World, t:ℕ, i:Id. ¬first(<i,t>) ⇒ pred(<i,t>) ∈ E
     {w_DASH_pred_DASH_aux}
     [the_w;time(e);loc(e)]
     THEN
     All
     (RWO
      Thm* ∀the_w:World, e:E. <loc(e),time(e)> ~ e
      {w_DASH_loc_DASH_time})
END
```