#### CLOVERLEAF CORPORATION



**NUCOR Cable Barrier** 



**QWICK KURB** 



BarrierGuard800



TAU-II™ Crash Cushior



**QMB** 



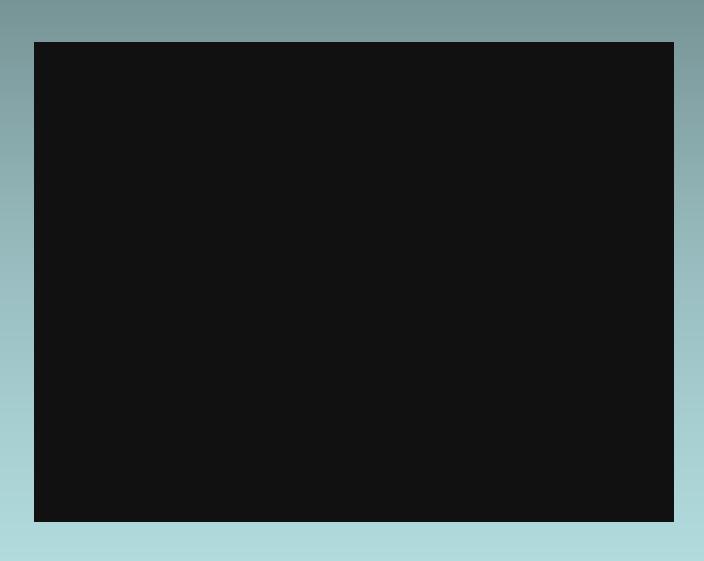
Safe-T-Grip High Friction Surface



NUCOR High Tension Cable Barrier

Information in this presentation is specific to the NUCOR high tension barrier system.

The Nucor high tension cable barrier is installed in the median on I-75 in Manatee, Sarasota and Charlotte counties.



Cable Barriers Have Been Saving Lives Since the 1930s



Crash Tested

By Texas Transportation Institute (TTI)

# Typically Minor Damage to Impacting Vehicles



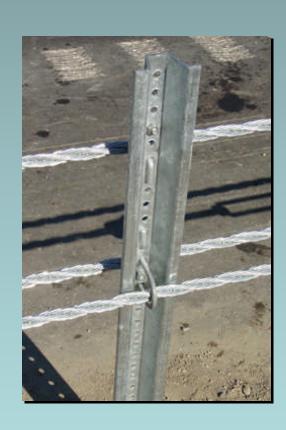
## **Two Major Components**



Cable & Posts

#### **Cables**

- Uses standard ¾" 3-strand braided steel cables that has been pre-tensioned
- Tensioned to 6,000 lbs after installation.
- Weight 0.857 lbs/FT



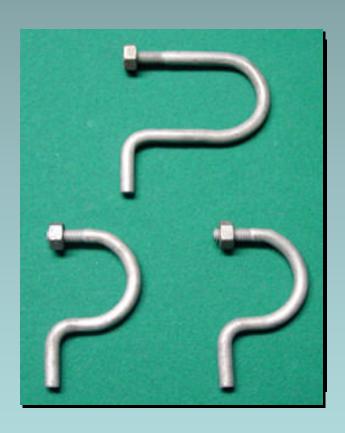
- Top Cable 29.5" from ground
- Middle Cable 25.5" from ground
- Bottom Cable 21.5"
   from ground



#### **Posts**







U Channel steel post weighs about 16 lbs. Three locking Hook Bolts attach cable to post

#### **Posts**

- Posts are slipped inside a steel tube that is encased in concrete
- Posts are spaced 16' on center.



## **Relaxing Tension**



 Tension can be relaxed by unwinding turnbuckles/cable ends to their maximum length.

### Turnbuckle & Cable End







#### **Relax Tension**

 In emergency situation, the CRPs can be longitudinally run over (slowly) with a truck. The CRPs will simply lay down and release the tension. The CRP posts can be reused.











The tension has been relaxed, but the cables are still hanging on the posts. The posts can be removed from their sockets.

## Cutting cable in an Emergency

- Recommended to relax tension first if possible. A vehicle trapped in the cable can create higher than normal tensions.
- Use abrasive wheel saw
- Ensure no one is near the cutting point, both upstream and down stream
- The locking Hook Bolts will help keep the cable from whipping great distance. If possible, the cable can be clamped to the hook bolts

Cable\_Cutting (2).wmv



Why isn't the cable laying on the ground?

- To get 2' slump in cables from gravity:
  - @ 5,600 lbs tension 330' unsupported cable (approx 21 posts)
  - @ 850 lbs tension 129' unsupported cable (approx 8 posts)

## Repairing a cut cable













NUCOR High Tension Cable Barrier