

# Engineering Study

## Control Device: Speed Limit Signs Walnut Grove 1 and 2

Roadway: CRs 852, 853, 854, 855, 856, 857 and 858

Location / Extent: Walnut Grove 1 and 2 subdivisions, North of McKinney (see exhibit "A")

Existing Speed Limit: None

Existing Traffic Control: None

Roadway Width/ Surface Type: All roads - 20-feet (2-Lane Asphalt)

Adjoining Land Development: Residential

Visibility: Good

Accident History: None have been reported to the Public Works Department

Traffic Counts: None taken for this study as this road lies within a residential subdivision

Radar Speed Survey Result: None taken for this study as this road lies within a residential subdivision

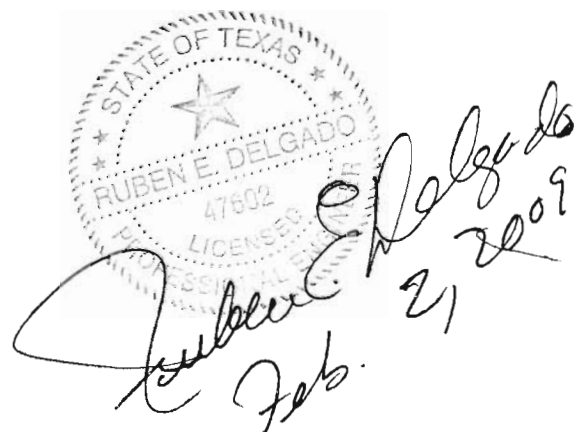
Roadway Design Speed: No specific data available

Other Factors: None

Recommendation: Since these roads lie within a residential subdivision, a 30 M.P.H. speed limit is recommended

Date: February 2, 2009

Engineer: Ruben Delgado, P.E.





## Engineering Study

### Control Device: Stop Signs Walnut Grove 1 and 2

Roadway / Intersection:

CR 853 at CR 852, CR 852 at CR 856, CR 855 at CR 852, CR 854 at CR 853/852, CR 854 at CR 857, CR 855 at CR 857, CR 858 at 856, CR 858 at CR 857 and CR 857 at CR 858

Location / Extent:

Walnut Grove 1 and 2 subdivisions, North of McKinney (see exhibit "A")

Existing Traffic Control:

Stop Sign at the intersection of CR 852 at US 380  
Stop Sign at the intersection of CR 856 and U S380  
Stop Sign at the intersection of CR 853 and FM 2478  
Stop Sign at the intersection of CR 857 and FM 2478  
Stop Sign at the intersection of CR 858 and FM 2478

Roadway Width/ Surface Type:

All roads are - 20-feet (2-Lane Asphalt)

Adjoining Land Development:

Residential

Visibility:

Good

Accident History:

None have been reported to the Public Works Department

Traffic Counts:

None taken for this study as these roads lie within a residential subdivision

Application for Stop Sign:

A stop sign is warranted by Section 2B.05 Article A of the 2006 Texas Manual on Uniform Traffic Control Devices

Other Factors:

Residents have requested Stop Signs.

Recommendation:

It is recommended that Stop Signs be placed at the intersections listed above as shown on the attached "Exhibit A".

Date:

February 2, 2009

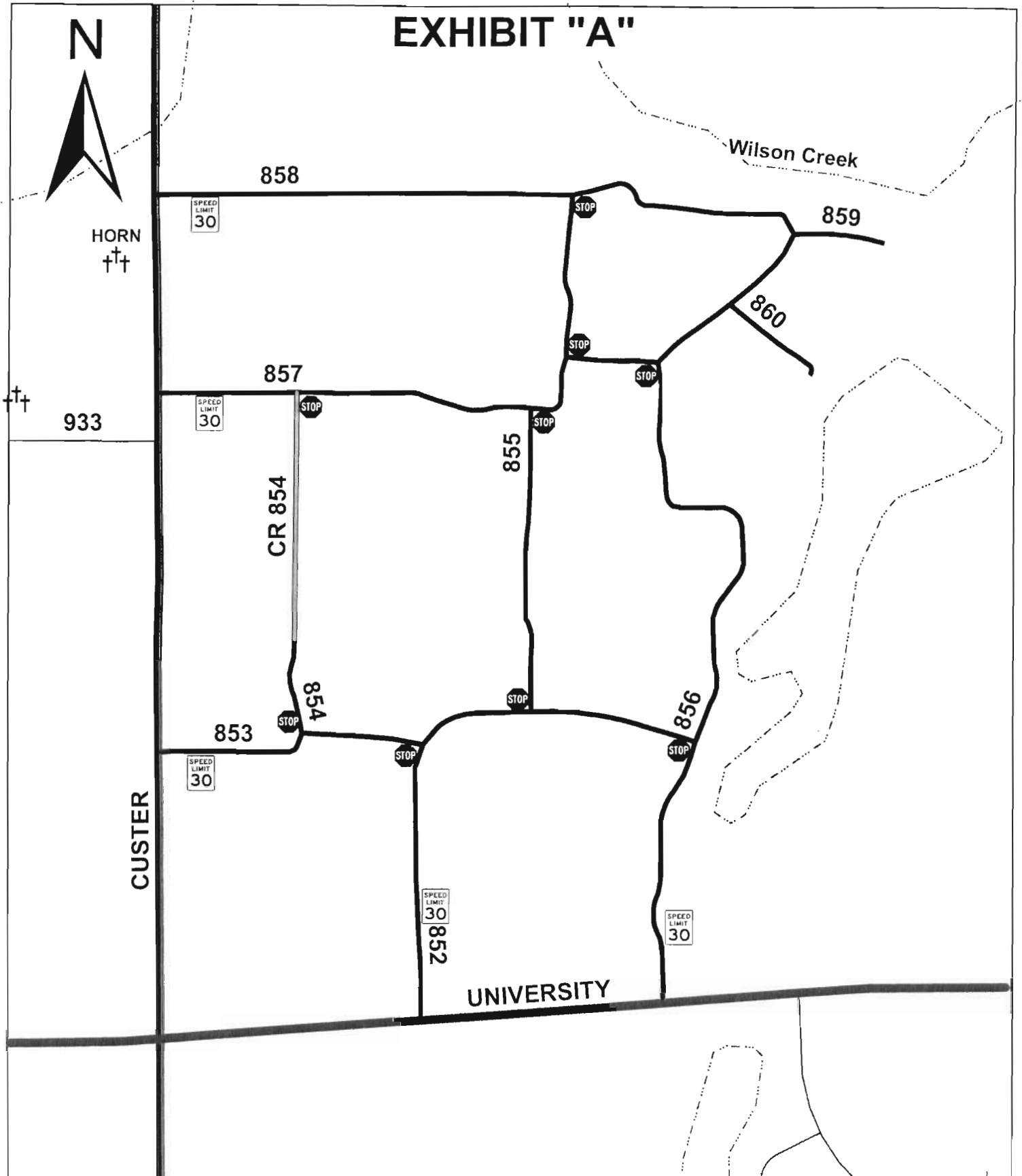
Engineer:

Ruben Delgado, P.E.



The image shows a circular professional engineer seal for the State of Texas. The seal contains the text "STATE OF TEXAS", "RUBEN E. DELGADO", "47602", and "PROFESSIONAL ENGINEER". Overlaid on the seal is a handwritten signature that appears to read "Ruben E. Delgado" and the date "Feb. 21 2009".

# EXHIBIT "A"



## LOCATION MAP WALNUT GROVE 1 AND 2



**Engineering Study**  
**Control Device: Speed Limit Signs CR 573**

<u>Roadway / Intersection:</u>	County Road 573
<u>Location / Extent:</u>	East of Melissa (see exhibit "A")
<u>Existing Speed Limit:</u>	None
<u>Existing Traffic Control:</u>	None
<u>Traffic Counts:</u>	110 Cars per day
<u>Roadway Width/ Surface Type:</u>	20-feet (2-Lane Asphalt)
<u>Adjoining Land Development:</u>	Pasture/Agricultural/ Residential
<u>Roadway Design Speed:</u>	None
<u>Visibility Along the Roadway:</u>	Good
<u>Accident History:</u>	No speed related accidents have been reported to the Public Works Department
<u>Radar Speed Survey Result:</u>	Unable to obtain due to limited traffic at the time of the survey.
<u>Other Factors:</u>	CR 573 has recently been upgraded to asphalt and the traffic is expected to increase.
<u>Recommendation:</u>	A 40 M.P.H. Speed Limit is recommended
<u>Date:</u>	February 2, 2009
<u>Engineer:</u>	Ruben Delgado, P.E.

  
*Ruben E. Delgado*  
Feb. 21 2009

# EXHIBIT "A"

832

N

1037

502

Lick Branch

500

SUBJECT LOCATION

573

501

Harrington Branch

FM 1377

470

470

Lick Branch



LOCATION MAP CR 573

## Engineering Study

### Control Device: Stop Sign CR 573

Roadway / Intersection: Intersection of CR 573 at CR 501, giving the right-of-way to the east-west traffic on CR 501.

Location / Extent: East of Melissa (see exhibit "A")

Existing Traffic Control: None

Roadway Width/ Surface Type: CR 573 – 20-feet (2-Lane Asphalt)  
CR 501 – 20-feet (2-Lane Asphalt)

Adjoining Land Development: Agricultural/Pasture/Residential

Visibility: Good

Accident History: None have been reported to Public Works Department

Traffic Counts: CR 573 – 100 Cars per Day  
CR 501 East of the intersection – 39 Cars per Day  
CR 501 West of the intersection – 22 Cars per Day


Application for Stop Sign: Stop signs are warranted by Section 2B.05 Article A of the 2006 Texas Manual on Uniform Traffic Control Devices

Other Factors: County Roads 573 and 501 have recently been upgraded to asphalt and the traffic is expected to increase.

Recommendation: It is recommended that Stop Signs be placed on CR 573 at the intersection with CR 501, giving the right-of-way to the east-west traffic on CR 501.

Date: February 2, 2009

Engineer: Ruben Delgado, P.E.



*Ruben E. Delgado*  
Feb. 2, 2009

# EXHIBIT "A"

832

N



1037

502

500

SUBJECT LOCATION

573

501

STOP

FM 1377

470

470



## LOCATION MAP CR 573



# Engineering Study

## Control Device: Speed Limit Signs CR 501

Roadway / Intersection: County Road 501

Location / Extent: East of Melissa (see exhibit "A")

Existing Speed Limit: None

Existing Traffic Control: Stop Sign at the intersection with CR 500  
Stop Sign at the intersection with FM 1377

Traffic Counts: 126 Cars per day

Roadway Width/ Surface Type: 20-feet (2-Lane Asphalt)

Adjoining Land Development: Pasture/Agricultural/ Residential

Roadway Design Speed: None

Visibility Along the Roadway: Good

Accident History: No speed related accidents have been reported to the Public Works Department

Radar Speed Survey Result: Unable to obtain due to limited traffic at the time of the survey.

Other Factors: CR 501 has recently been upgraded to asphalt and the traffic is expected to increase.

Recommendation: A 40 M.P.H. Speed Limit is recommended

Date: February 2, 2009

Engineer: Ruben Delgado, P.E.



*E. Delgado*  
*Feb. 2, 2009*

# EXHIBIT "A"

832

N



1037

500

502

Lick Branch

573

501

Harrington Branch

SUBJECT LOCATION

FM 1377

470

470

Lick Branch



LOCATION MAP CR 501

# Engineering Study

## Control Device: Speed Limit Reduction CR 134

Roadway / Intersection: County Road 134, from CR 97 west to Preston RD, SH289

Location / Extent: North of Celina (see exhibit "A")

Existing Speed Limit: 50 M.P.H.

Existing Traffic Control: Stop Sign at the intersection with SH289, Preston RD

Traffic Counts Bi-Directional: CR 134 at CR 97 – 1312 Cars per School Day  
CR 134 at SH 289 – 1846 cars per School Day

Roadway Width/ Surface Type: 24-feet (2-Lane Asphalt)

Adjoining Land Development: Pasture/Residential/Agricultural  
Celina High School

Roadway Design Speed: None

Visibility Along the Roadway: Good

Accident History: No speed related accidents have been reported to the Public Works Department

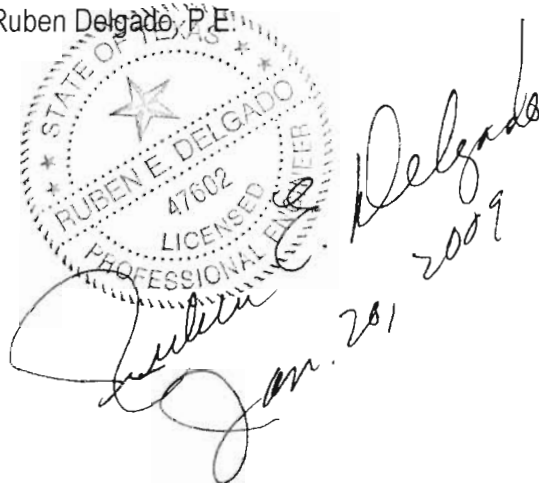
Radar Speed Survey Result: Top 85<sup>th</sup> Percentile Speed – 55 M.P.H.

Other Factors: Public Works has been requested to lower the existing speed limit adjacent to the new Celina High School.

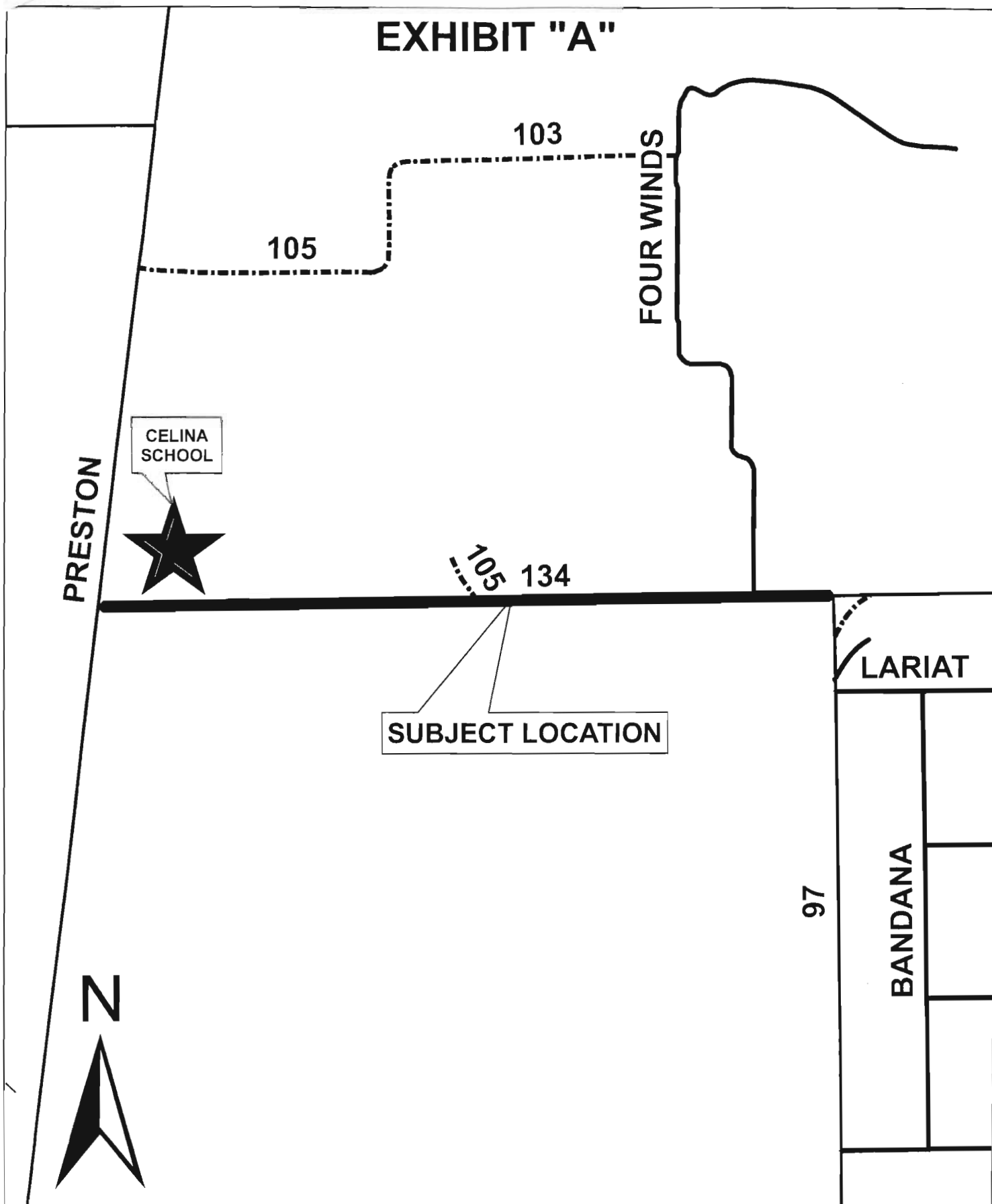
Recommendation: A 35 M.P.H. Speed Limit is recommended from CR 97 west to SH289.

Date: January 12, 2009

Engineer: Ruben Delgado, P.E.



# EXHIBIT "A"



LOCATION MAP CR 134