

**ALLEN TOWNSHIP**  
**NORTHAMPTON COUNTY, PENNSYLVANIA**  
**ORDINANCE NO. 2016-01**

**AN ORDINANCE OF THE TOWNSHIP OF ALLEN , COUNTY OF NORTHAMPTON, COMMONWEALTH OF PENNSYLVANIA AMENDING AND REVISING CHAPTER 15, VEHICLES AND TRAFFIC, OF THE CODE OF THE TOWNSHIP OF ALLEN TOWNSHIP TO PROHIBIT TRUCK TRAFFIC ON SAVAGE ROAD BETWEEN NOR-BATH BOULEVARD (SR 329) AND WILLOWBROOK ROAD; ON WILLOWBROOK ROAD BETWEEN SAVAGE ROAD AND THE MUNICIPAL BOUNDARY LINE WITH HANOVER TOWNSHIP, LEHIGH COUNTY; ON EAST BULLSHEAD ROAD BETWEEN WILLOWBROOK ROAD AND THE MUNICIPAL BOUNDARY LINE WITH EAST ALLEN TOWNSHIP, NORTHAMPTON COUNTY; AND ON WEST BULLSHEAD ROAD BETWEEN WILLOWBROOK ROAD TO THE MUNICIPAL BOUNDARY LINE WITH NORTHAMPTON BOROUGH, NORTHAMPTON COUNTY; AND TO PROVIDE PENALTIES FOR VIOLATIONS OF THIS ORDINANCE**

**WHEREAS, the Township of Allen adopted Ordinance # 2007-04, enacting the Code of Ordinances of the Township of Allen (hereinafter referred to as the “Code”); and**

**WHEREAS, the Allen Township Board of Supervisors desires to amend the Code of Ordinances of the Township of Allen to revise and replace certain provisions of Chapter 15 (Zoning) relating to truck restrictions on certain roadways within the Township of Allen.**

**WHEREAS, the Township of Allen Township desires to amend Chapter 15, Vehicles and Traffic, at Part 3, Section 304, to prohibit the operation of trucks of any kind over**

Draft 02/03/16  
Approved 02/23/16

and upon Savage Road between Nor-Bath Boulevard (SR 329) and Willowbrook Road; on Willowbrook Road from Savage Road to the municipal boundary line with Hanover Township, Lehigh County; on East Bullshead Road from Willowbrook Road to the municipal boundary line with East Allen Township, Northampton County; and on West Bullshead Road from Willowbrook Road to the municipal boundary line with Northampton Borough, Northampton County; and

**WHEREAS**, the Township has complied with all applicable pre-requisites and/or requirements, including the applicable engineering and traffic studies, under the law with regard to the prohibition of truck traffic and the installation of traffic devices; and

**WHEREAS**, Hanover Engineering Associates, Inc. conducted and completed a Truck Restriction Study for Willowbrook Road (T-478), East & West Bullshead Road (T-482), and Savage Road (T-463), dated November 2015; and

**WHEREAS**, the conclusions stated in the Traffic Study provide for the prohibition of truck traffic on the studied roadways; and

**WHEREAS**, the Board of Supervisors of Allen Township has determined that prohibiting truck traffic on the aforementioned roadways will be in the best interests of the Township and its residents.

**NOW THEREFORE, BE IT ORDAINED AND ENACTED** by the Board of Supervisors of the Township of Allen, County of Northampton, and Commonwealth of Pennsylvania as follows:

**SECTION 1.      Whereas Clauses**

The foregoing Whereas clauses are incorporated herein as if the same were fully set forth again at length.

Draft 02/03/16  
Approved 02/23/16

**SECTION 2. Amendment to Chapter 15 (Vehicles and Traffic), Part 3 (Restrictions on Size, Weight and Type of Vehicle and Load), Section 304 (Truck Traffic Restricted on Certain Streets)**

Chapter 15, Vehicles and Traffic, at §15-304 (Truck Traffic Restricted on Certain Streets) of the Code of the Township of Allen is hereby deleted in its entirety and replaced as follows:

“It shall be unlawful for any person to drive a vehicle other than a passenger vehicle, motorcycle, or other vehicle intended primarily for the transportation of passengers on any of the following streets or parts of streets, provided that nothing in this section shall prohibit any person from driving an emergency vehicle on any of those streets or parts of streets, or from driving on any of those streets or parts of streets a truck or other commercial vehicle making local deliveries to or pickups from premises located along that street or part of a street:

1. Savage Road Between Nor-Bath Boulevard (SR 329) and Willowbrook Road;
2. Willowbrook Road Between Savage Road and the municipal boundary line with Hanover Township, Lehigh County
3. East Bullshead Road Between Willowbrook Road and the municipal boundary line with East Allen Township, Northampton County.
4. West Bullshead Road Between Willowbrook Road to the municipal boundary line with Northampton Borough, Northampton County”

**SECTION 3. Amendment to Chapter 15 (Vehicles and Traffic), Part 3 (Restrictions on Size, Weight and Type of Vehicle and Load), Section 304. (Truck Traffic Restricted on Certain Streets)**

Chapter 15, Vehicles and Traffic, at §15-304(Truck Traffic Restricted on Certain Streets) of the Code of the Township of Allen is hereby amended by adding subsection (3) as follows:

3. “The Board of Supervisors of Allen Township shall cause official traffic signs to be erected along the roadways identified in Section 304 of this Article in such locations

Draft 02/03/16  
Approved 02/23/16

and of such type, size and number as required by the Pennsylvania Department of Transportation and/or the "Manual on Uniform Traffic Control Devices" published by the Federal Highway Administration, or as otherwise deemed necessary for the health, safety, and welfare of the traveling public."

**SECTION 4. Severability**

The provisions of this Ordinance are severable. If any sentence, clause, or Section of this Ordinance is for any reason found to be unconstitutional, illegal, or invalid; such decision shall not affect the validity of any of the remaining provisions of this Ordinance. It is hereby declared as a legislative intent that this Ordinance would have been adopted had such unconstitutional illegal or invalid provision not been included herein.

**SECTION 5. Repealer**

All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

**SECTION 6. Effective Date**

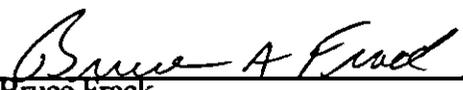
This Ordinance shall become effective five (5) days after adoption thereof.

ENACTED and ORDAINED this *23<sup>rd</sup>* day of *February*, 2016.

Attest

Allen Township

  
Secretary

  
Bruce Frack  
Chairman

# TRUCK RESTRICTION STUDY

FOR:

**WILLOWBROOK ROAD (T-478), EAST & WEST  
BULLSHEAD ROAD (T-482) & SAVAGE ROAD (T-463)**

LOCATED IN:

**ALLEN TOWNSHIP, EAST ALLEN TOWNSHIP & NORTHAMPTON BOROUGH  
NORTHAMPTON COUNTY, PA**

November 2015

Prepared for:  
Allen Township  
East Allen Township  
Northampton Borough  
Northampton County, PA

Prepared by:

**Hanover**  
**Engineering Associates Inc**

252 Brodhead Road, Suite 100  
Bethlehem, PA 18017-8944  
Phone 610.691.5644 • Fax 610.691.6968

Hanover Project A15-36

**NARRATIVE**

Hanover Engineering Associates, Inc., as Township Engineer for Allen Township, Northampton County, prepared this report to investigate the current traffic characteristics of Willowbrook Road (T-478) and Savage Road (T-463) between Nor-Bath Boulevard (SR 0329) and the southern Municipal boundary as well as along East Bullshead Road from Willowbrook Road to Weaversville Road (SR 3017) in East Allen Township and along West Bullshead Road (T-482) from Willowbrook Road to Howertown Road in Northampton Borough, respectively. Specifically, the Allen Township Board of Supervisors requested the investigation to determine a need for truck traffic restrictions along these roadway segments. Because a portion of these roads fall within adjacent municipalities, East Allen Township and Northampton Borough were asked to participate.

A truck traffic restriction should be considered where either the existing roadway conditions and/or the existing traffic conditions are poorly suited for trucks, or truck traffic is incompatible with adjacent land uses. This study was prepared in accordance with Pennsylvania Department of Transportation (PennDOT) Publication 212, *Official Traffic Control Devices*, Subchapter B, Section 212.117. As part of this report, a review of existing traffic conditions, roadway geometrics, and alternative routes were performed for Willowbrook Road, Savage Road and East & West Bullshead Road to determine if trucks should be prohibited for the protection and safety of the public. Applicable references and supporting data are provided at the end of this report.

**STUDY AREA**

The following table summarizes the existing roadway characteristics along Willowbrook Road, Savage Road and both segments of Bullshead Road within Allen Township and the respective study limits considered for a truck restriction. A map of the study area is provided in Appendix A.

Roadway <sup>1</sup>	Study Limits	Length	No. of Lanes	Speed Limit
Willowbrook Road (T-478)	Allen Township Border to Savage Road	1.61 miles	2	35 mph
Savage Road (T-463)	Willowbrook Road to Nor-Bath Boulevard (SR 0329)	0.82 miles	2	35 mph
East Bullshead Road (T-482) <sup>2</sup>	Weaversville Road (East Allen Township) to Willowbrook Road	0.72 miles	2	35 mph
West Bullshead Road (T-482) <sup>3</sup>	Howertown Road (Northampton Borough) to Willowbrook Road	0.63 miles	2	40 mph

<sup>1</sup>Willowbrook Road intersects Savage Road forming a 4-way stop intersection. Savage Road intersects Nor-Bath Boulevard forming a signalized 4-leg intersection. East and West Bullshead Road form two (2) offset "T" intersections with Willowbrook Road.

<sup>2</sup>East Bullshead Road (T-482) has a 0.16 mile segment within East Allen Township.

<sup>3</sup>West Bullshead Road becomes E. 4<sup>th</sup> Street in Northampton Borough for a 0.10 mile segment.

## **BACKGROUND**

There is concern trucks traveling along Nor-Bath Boulevard (SR 0329) or Race Street (SR 1004) will utilize Willowbrook Road, Bullshead Road and Savage Road, local Township owned and maintained roadways, to avoid traveling along the State owned and maintained truck routes through the Borough of Catasauqua, Borough of Northampton or East Allen Township. Willowbrook Road, Bullshead Road and Savage Road are not designed or intended to accommodate such truck traffic, and this route requires truck traffic to proceed along residential neighborhoods, Howertown Park, Wayne Grube Park, Nor-Bath Trail crossings, Catasauqua High School and the Township bike lane along Willowbrook Road. A location map depicting the study area is contained in **Appendix A**.

Willowbrook Road (T-478) is a Township owned and maintained facility acting as a north/south collector route traversing from the southern Municipal boundary to Savage Road in Allen Township. Savage Road (T-463) is a Township owned and maintained facility acting as a north/south collector route traversing from Nor-Bath Boulevard (SR 0329) to Willowbrook Road in Allen Township. Savage Road becomes E. 10<sup>th</sup> Street in Northampton Borough. Bullshead Road (T-482) is a Township/Borough owned and maintained facility acting as an east & west collector, traversing from Northampton Borough to the west and East Allen Township to the east.

Willowbrook Road, Savage Road, and Bullshead Road primarily carry local motorists to residential neighborhood developments, the Catasauqua High School or to public recreation facilities (Howertown Park, Wayne Grube Memorial Park and the Nor-Bath Trail). The concern arises from the increased traffic using these routes as cut-throughs to the State owned and maintained facilities of Nor-Bath Boulevard (SR 0329) and Race Street (SR 1004). Of particular concern is increased truck traffic deteriorating the roadway and compromising public safety.

## **EXISTING TRAFFIC CONDITIONS**

Regarding traffic conditions, the grounds for a truck restriction under state law and regulation must meet the following criteria:

*PennDOT Publication 212, Section 212.117(d) Traffic on a highway or bridge may be prohibited or restricted by weight or size of vehicle, or kinds or classes of vehicles when, an engineering evaluation of the horizontal and vertical alignment, prevailing traffic speeds, compatibility of the various types of traffic, history of vehicle crashes or vehicular characteristics, indicates that the movement of certain vehicles constitutes a safety hazard. Restrictions may include weight; height, width or length of vehicles or their loads; types of cargo; speed or gearing; stopping requirements; specified travel lanes; and hours of operation.*

Our analysis of the existing traffic conditions includes an evaluation of roadway geometry, existing roadway characteristics, and compatibility with adjacent land uses.

## **GEOMETRIC REVIEW**

The width of the roadway, grades, roadside obstructions and adjacent development were reviewed as part this study to determine if roadway geometrics and conditions along Willowbrook Road, Savage Road and Bullshead Road support a truck prohibition.

Regarding highway conditions, the following criteria must be met for a truck restriction under state law and regulation:

**PennDOT Publication 212 Section 212.117(b)** *Traffic on a highway may be prohibited or restricted by weight of vehicle, or kinds or classes of vehicles when warranted by an engineering evaluation. Engineering evaluation may be based on structural analysis, testing engineering judgment or a combination thereof. A restriction is warranted when one or more of the following conditions are present:*

- (1) The highway pavement or shoulder have inadequate structural capacity or have been weakened due to deterioration, high traffic volumes or climatic condition, and may be seriously damaged unless a restriction is imposed.*
- (2) An engineering evaluation of previous similar climatic condition on the highway or on similar highways indicates that vehicles over a certain weight should have been prohibited.*

**PennDOT Publication 212 Section 212.117(c)(2)** *A highway has inadequate turning radii, horizontal width or creates concerns for vehicles with low ground clearance at one or more locations.*

Willowbrook Road, Savage Road, and East & West Bullshead Road are classified by PennDOT as urban local roads that currently consists of bituminous surface in fair to poor condition; however, base course and subgrade are of unknown materials. Both Willowbrook Road and Savage Road are curbed in developed areas with rolled asphalt curb or no curb in the undeveloped areas adjacent to agricultural uses. West Bullshead Road is curbed along the north side of the roadway with no curbing on the southern side. East Bullshead Road is an uncurbed roadway. Pavement seams, reflective cracking and travel lane tire wear were apparent throughout the study area roadways.

Willowbrook Road varies in width, with 11-12 foot wide travel lanes and paved shoulders varying from 0-8 feet. A paved bike lane runs along Willowbrook Road providing connectivity between the Catasauqua High School, public parks and residential neighborhoods in the area. Willowbrook Road is currently posted with a 10 ton weight limit between the Hanover Township, Lehigh County border and W. Bullshead Road due to the pavement condition and capacity to handle truck traffic.

An open-grate bridge is located immediately south of W. Bullshead Road with a posted weight restriction of 20 tons. This bridge is approximately 23 feet wide with 11 foot lanes. The location of roadside obstructions varies between 1-14+ feet from the edge of pavement.

Savage Road varies in width, with 11-12 foot wide travel lanes and 0-8 foot wide paved shoulders. At the intersection with Willowbrook Road, Savage Road provides 14-18 foot wide travel lanes and 2 foot paved shoulders. Bike lanes are not designated along the shoulders of Savage Road.

West Bullshead Road varies in width, with 12 foot wide travel lanes and paved shoulders varying from 1-8 feet. A portion of the developed area along the north side includes a paved bike lane adjacent to the roadway along Catasauqua High School. Similarly, East Bullshead Road varies in width with 10-14 foot wide travel lanes and no shoulders. Portions of East Bullshead Road contain mature trees within 2-4 feet from the edge of pavement. There is also a twelve foot (12') vertical clearance restriction under the Nor-Bath Trail along East Bullshead Road.

With the exception of the weight limitations along Willowbrook Road, as currently constructed, Willowbrook Road, Savage Road and West Bullshead Road generally meet the minimum criteria for shoulders and travel lane widths set forth in PennDOT Publication 13M, Design Manual Part 2 (DM-2), with the exception of areas of limited or unconstructed shoulders. Portions of East Bullshead Road do not meet the minimum width criteria. Design standards require a minimum travel lane width of 11-12 feet for local roadways to accommodate truck traffic with a speed limit of 20-35 mph.

In addition, a concrete box culvert bridge is located on Willowbrook Road, immediately south of Savage Road. While there is no posted weight restriction for this bridge, the bridge provides 12 foot wide travel lanes and 2.5 foot wide shoulders without pedestrian accommodations.

Vertical grades were field measured along Willowbrook Road, Savage Road, and Bullshead Road at various locations along the roadway using a digital smart level. The roadway profile varies with grades of 0.0%-9.9%. There are two (2) segments of Willowbrook Road between McNair Drive and the Catasauqua High School that have average grades in excess of 4% for lengths of 660-700 feet.

### **ADJACENT LAND USES**

In this area of Allen Township, the land adjacent to Willowbrook Road and Savage Road is currently a mix of agriculture, residential and institutional uses with a few smaller commercial properties. While these land uses do not initially appear to create traffic concerns, the combination of vehicular traffic, bicycles, and pedestrian traffic in the area of several residential developments, the Catasauqua High School, Wayne Grube Park, Howertown Park and the Nor-Bath Trail raises safety concerns along a roadway of average width with minimal shoulders, particularly adjacent to the Willowbrook Road and West Bullshead Road bike lanes. These conditions are not desirable for pedestrians and bicyclists; therefore, the use of this roadway by trucks traversing between Race Street (SR 1004) and Nor-Bath Boulevard (SR 0329) is not recommended. In addition to area wide traffic growth, there are development proposals along Willowbrook Road (to the south) and SR 0329 to the north which could contribute to increased traffic along the study area roadways.

### **ALTERNATIVE ROUTES**

An alternative truck route is not required to be designated as the study area roadways are not numbered traffic routes or state-designated highways. Likewise, truck traffic can continue to utilize Nor-Bath Boulevard (SR 0329), Race Street (SR 1004) and Airport Road (SR 0987), which are state routes providing truck access to these areas of the Township.

### **RECOMMENDATIONS & CONCLUSIONS**

In accordance with Pennsylvania Department of Transportation (PennDOT) Publication 212, *Official Traffic Control Devices*, Subchapter B, Section 212.117 a truck prohibition is justified for Willowbrook Road, Savage Road, East and West Bullshead Road for the following reasons:

1. An engineering evaluation of the vertical and horizontal alignment on Willowbrook Road, Savage Road and East & West Bullshead Road indicates that the movement of heavy truck traffic may constitute a safety hazard and is not compatible with several adjacent land uses.
2. Pavement and shoulder appear to have inadequate structural capacity and may be seriously damaged unless a restriction is imposed along the study area roadways.
3. Willowbrook Road has a roadway weight restriction of 10 tons and bridge weight restriction of 20 tons in addition to restricted horizontal alignment/clearance width and vertical grades creating concerns for large or heavy vehicles at several locations.
4. Truck traffic can continue to utilize Nor-Bath Boulevard (SR 0329), Race Street (SR 1004) and Airport Road (SR 0987) as the primary routes in lieu of Willowbrook Road and Savage Road.
5. Per PennDOT Publication 212 Section 212.117(b)(2)(e):

*Appropriate signs shall be erected within 25 feet of each end of a restricted portion of a highway or bridge whenever vehicles are prohibited under subsection (a), (b), (c) or (d). In the case of a restriction on a highway or bridge which does not begin or end at an intersection with an unrestricted highway, an advance information sign shall also be erected at the intersection nearest each end of the restricted highway or bridge to allow drivers to avoid the restricted highway or bridge.*

If approved by the Allen Township Board of Supervisors, East Allen Township and Northampton Borough, signs must be placed: 1) within 25 feet of the Savage Road intersection with Nor-Bath Boulevard, 2) within 25 feet of the Willowbrook Road and Savage Road intersection, 3) within 25 feet of the East Bullshead Road and Weaversville Road intersection and 4) within 25 feet of the West Bullshead Road and Howertown Road intersection to restrict truck traffic except for local deliveries. Since Willowbrook Road is already posted with the truck restriction at, and in advance of the southern Municipal boundary, additional signage at this location is not required.

We recommend that signage be installed at the intersections referenced above, in coordination with the adjacent municipalities of East Allen Township and Northampton Borough. A map is attached with the location and signage type. The signs should be installed outside the right-of-way of the State roads and should be clearly visible to traffic prior to entering the restricted street.

The PennDOT approved sign specifications are attached to this report. These signs include: R5-2 "No Truck" and R5-2-3 "Except Local Deliveries".

The implementation of these recommendations should adequately discourage truck traffic from Willowbrook Road, Savage Road and East & West Bullshead Road to improve the overall safety along these roadways.

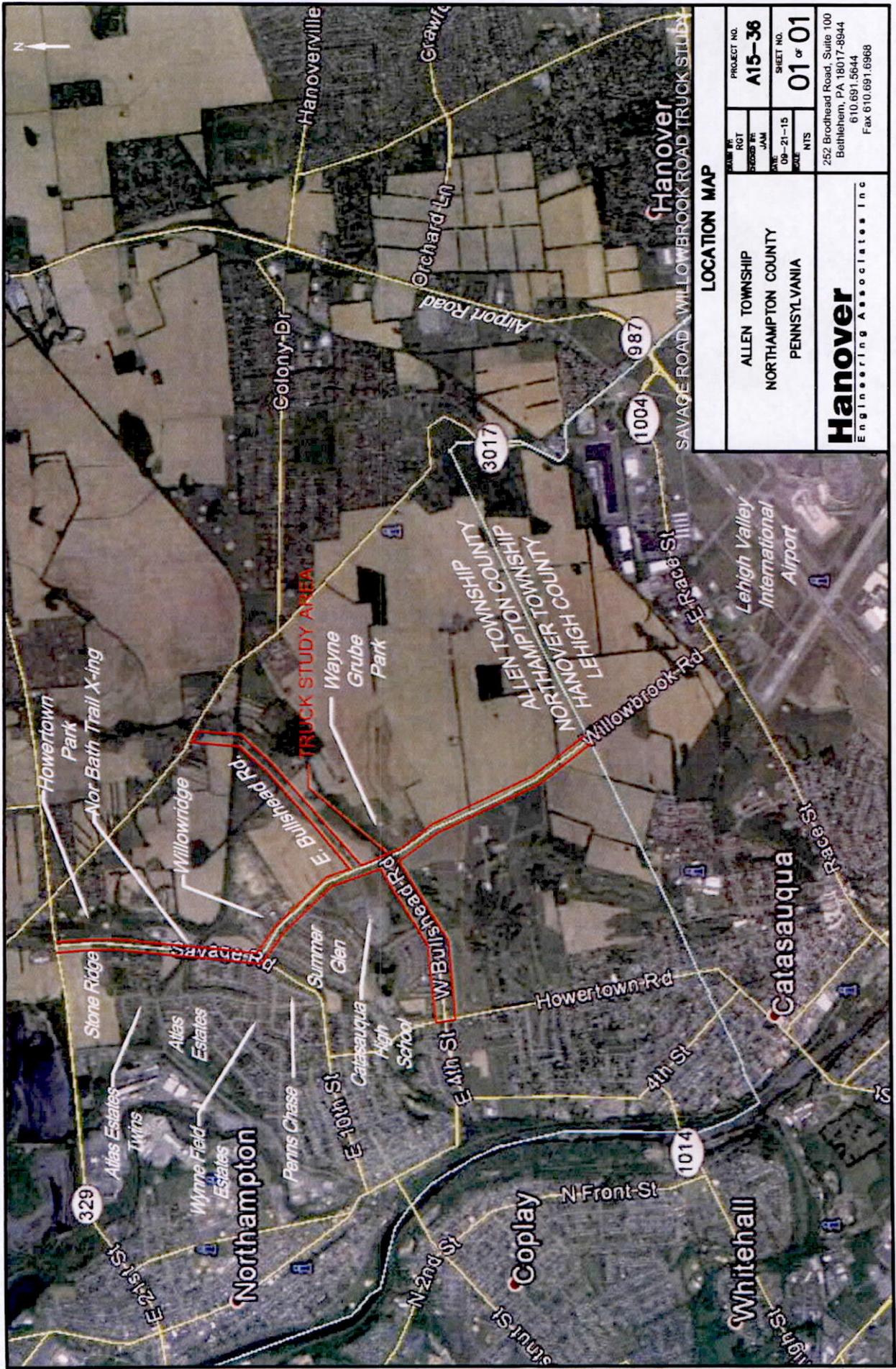
Willowbrook Road, Savage Road & Bullshead Road Truck Restriction Study  
Allen Township, East Allen Township & Northampton Borough, Northampton County

## **APPENDICES**

Willowbrook Road, Savage Road & Bullshead Road Truck Restriction Study  
Allen Township, East Allen Township & Northampton Borough, Northampton County

## **APPENDIX A**

Location Map



**LOCATION MAP**

PROJECT NO.	A15-36
SHEET NO.	01 of 01
DATE	09-21-15
SCALE	NTS
252 Brodhead Road, Suite 100 Bethlehem, PA 18017-8944 610.691.5644 Fax 610.691.6968	

ALLEN TOWNSHIP  
 NORTHAMPTON COUNTY  
 PENNSYLVANIA

**Hanover**  
 Engineering Associates Inc

Willowbrook Road, Savage Road & Bullshead Road Truck Restriction Study  
Allen Township, East Allen Township & Northampton Borough, Northampton County

## **APPENDIX B**

PennDOT Publication 212 Excerpts

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF TRANSPORTATION  
*Bureau of Highway Safety and Traffic Engineering*

# OFFICIAL TRAFFIC CONTROL DEVICES

*Publication 212*



Pub 212 (3-06)

## § 212.117. Weight, size and load restrictions.

(a) *Weight restriction based on condition of bridge.* Traffic on a bridge may be prohibited or restricted by weight of vehicle, number of vehicles, or kinds or classes of vehicles when an engineering evaluation conducted by a professional engineer establishes the need. Engineering evaluation of a bridge or bridge component may be based on structural analysis and rating computations, testing, engineering judgment or a combination thereof. Restriction is warranted when one or more of the following conditions are present:

(1) The safe load capacity of the bridge is exceeded by the load effect of any of the legal load configurations. The capacity and load effects are to be determined in accordance with the *Bridge Safety Inspection Manual* ([Department Publication 238](#)).

(2) Engineering judgment indicates that the condition or material of construction of one or more portions or components of a bridge is such that further use by heavy vehicles may damage the bridge because of severe impact, fatigue or other reasons.

(3) The bridge is damaged due to fire, a vehicle crash or environmental deterioration, and engineering judgment indicates that a vehicle weight restriction is necessary to ensure an adequate level of safety.

(b) *Weight restriction based on condition of highway.* Traffic on a highway may be prohibited or restricted by weight of vehicle, or kinds or classes of vehicles when warranted by an engineering evaluation. Engineering evaluation may be based on structural analysis, testing, engineering judgment or a combination thereof. A restriction is warranted when one or more of the following conditions are present:

(1) The highway pavement or shoulders have inadequate structural capacity or have been weakened due to deterioration, high traffic volumes or climatic condition, and may be seriously damaged unless a restriction is imposed.

(2) An engineering evaluation of previous similar climatic conditions on the highway or on similar highways indicates that vehicles over a certain weight should have been prohibited.

(c) *Size restriction based on condition of bridge or highway.* Traffic on a bridge or highway may be restricted by size of vehicle or kinds or classes of vehicles when, after an engineering evaluation, one or more of the following conditions are found to be present:

(1) A bridge has poor alignment, substandard horizontal or vertical clearance, or creates problems for vehicles with low ground clearance, or the restriction is otherwise necessary to protect the bridge from vehicle crashes or damage.

(2) A highway has inadequate turning radii, horizontal width or creates concerns for vehicles with low ground clearance at one or more locations.

(d) *Weight and size restrictions based on traffic conditions.* Traffic on a highway or bridge may be prohibited or restricted by weight or size of vehicle, or kinds or classes of vehicles when, an engineering evaluation of the horizontal and vertical alignment, prevailing traffic speeds, compatibility of the various types of traffic, history of vehicle crashes or vehicular characteristics, indicates that the movement of certain vehicles constitutes a safety hazard. Restrictions may include weight; height, width or length of vehicles or their loads; types of cargo; speed or gearing; stopping requirements; specified travel lanes; and hours of operation.

(e) *Erection of signs.* Appropriate signs shall be erected within 25 feet of each end of a restricted portion of a highway or bridge whenever vehicles are prohibited under subsection (a), (b), (c) or (d). In the case of a restriction on a highway or bridge which does not begin or end at an intersection with an unrestricted highway, an advance information sign shall also be erected at the intersection nearest each end of the restricted highway or bridge to allow drivers to avoid the restricted highway or bridge.

(f) *Alternate routes.* An alternate route shall be established whenever vehicles are prohibited under subsection (a) or (b) on either a numbered traffic route or a State-designated highway on the National Highway System, as established by the Federal Highway Administration, when the following apply:

(1) A reasonable alternate route exists which is not readily perceived by drivers.

(2) The alternate route can legally, safely, structurally and physically accommodate the weight and size of vehicles and their loads that are being detoured.

(3) Five or more vehicles per day are estimated to be prohibited from using the original route.

Willowbrook Road, Savage Road & Bullshead Road Truck Restriction Study  
Allen Township, East Allen Township & Northampton Borough, Northampton County

**APPENDIX C**  
PennDOT Sign Specifications

# HANDBOOK OF APPROVED SIGNS

PUBLICATION 236

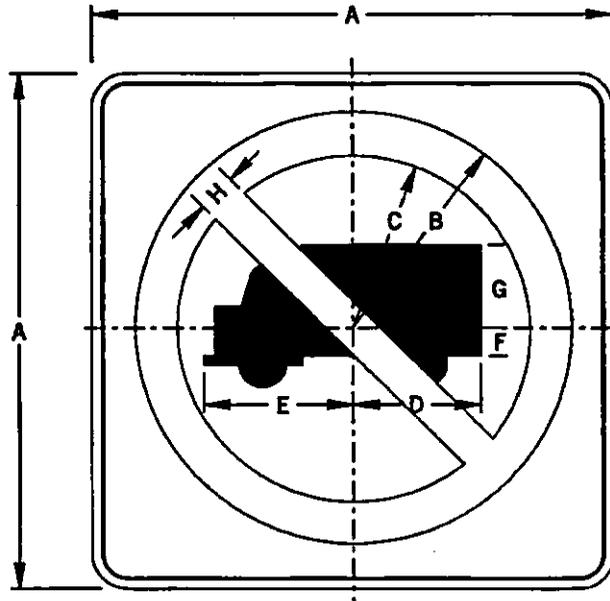


# R5-2

## NO TRUCK SIGN

(a) Justification. The No Truck Sign (R5-2) shall be authorized for use to prohibit trucks, except that such vehicles may be operated thereon for the purpose of delivering or picking up materials or merchandise. When local truck deliveries are permitted, the Except Local Deliveries Sign (R5-2-3) shall be mounted beneath the R5-2 sign.

(b) Size. The standard size of the R5-2 sign shall be 24" x 24".



DIMENSIONS - IN										
SIGN SIZE A x A	B	C	D	E	F	G	H	MAR- GIN	BOR- DER	BLANK STD.
24" x 24"	10.5	8.5	6.5	7.5	1.8	4.3	2	0.4	0.6	B3-24
30" x 30"	13.2	10.6	8.1	9.4	4.7	5.3	2.6	0.4	0.8	B3-30
36" x 36"	15.8	12.8	9.8	11.3	5.6	6.4	3	0.6	1	B3-36
48" x 48"	21	17	13	15	7.5	8.5	4	0.8	1.2	B3-48

COLOR:

SYMBOL AND BORDER:  
BLACK (NON-REFLECTORIZED)

CIRCLE AND SLASH:  
RED (REFLECTORIZED)

BACKGROUND:  
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Al C. Rowe Date : 02-29-12  
Chief, Traffic Engineering and Permits Section  
Bureau of Maintenance and Operations

# R5-2-3

## EXCEPT LOCAL DELIVERIES SIGN

The Except Local Deliveries Sign (R5-2-3) may be used below the No Trucks Sign (R5-2), Weight Limit ( ) Tons Sign (R12-1), and the Except Combinations ( ) Tons Sign (R12-5A) when kinds or classes of vehicles are prohibited except for local deliveries. Local deliveries are defined as deliveries going to or from a residence, commercial establishment, or farm located on a posted highway or which can be reached only via a posted highway. The R5-2-3 sign shall not, however, be used when a bridge or other structure is not capable of supporting the legal weight limit. The term "RESIDENTIAL" may be substituted for "LOCAL" if there is a commercial development in the area and satisfactory alternate access roadways exist for the commercial development.

When used the R5-2-3 sign shall be mounted below the R5-2, R12-1, or R12-5A sign. The R5-2-3 sign shall be the same width as the sign it supplements.



DIMENSIONS - IN										
SIGN SIZE A x B	C	D	E	F	G	H	J	MAR- GIN	BOR- DER	BLANK STD.
24" x 18"	2.5	3C	2	2.5	6.1	5.1	9.3	0.4	0.4	B5-2418
36" x 30"	4.1	5C	3.4	4.1	10.1	8.4	15.4	0.6	0.6	B5-3630
48" x 36"	5	6C	4	5	12.1	10.2	18.5	0.6	0.8	B5-4836

COLOR:

LEGEND AND BORDER:  
BLACK (NON-REFLECTORIZED)

BACKGROUND:  
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Alan C. Rose Date : 02-29-12  
Chief, Traffic Engineering and Permits Section  
Bureau of Maintenance and Operations