

CERTIFIED

ESCORT VEHICLE

OPERATOR HANDBOOK

OVERSIZE LOAD

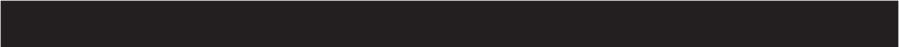


North Carolina Department of Transportation

2024

A large, light gray, stylized triangle graphic that serves as a background for the title. It is composed of two thick, slightly irregular lines that meet at a point at the top, creating a simple mountain-like shape.

Certified **Escort Vehicle** Operator Handbook



Certified
Escort Vehicle
Operator Handbook

2024

Presented by:
**North Carolina
Community College System**

Sponsored by:
**North Carolina
Department of Transportation
Oversize/Overweight Permit Unit**

750 N. Greenfield Parkway
Garner, NC 27529

(919) 814-3700
1-888-221-8166



TABLE OF CONTENTS

CHAPTER ONE

STATE OF NORTH CAROLINA EVO PROGRAM	1-1
<i>PROGRAM BASICS</i>	<i>1-1</i>
Qualifications	1-1
How to Become Certified	1-2
How to Become Recertified	1-2
How to Obtain a Certified Driving Record	1-2
Certification Fees	1-2
Change of Name/Address & Replacement Certification Card	1-2
Revocation of Certification	1-3
Revocation of Certification — Appeal Process	1-3
STATE OF NORTH CAROLINA RULES FOR OVERSIZE/ OVERWEIGHT LOADS AND ESCORT VEHICLES	1-3
OS/OW Loads Requiring an Escort	1-4
REQUIRED EQUIPMENT	1-4
Special Rules: 16' Wide Mobile Homes	1-5
OPTIONAL EQUIPMENT	1-6

CHAPTER TWO

FUNCTIONS AND DUTIES OF ESCORT DRIVERS	2-1
<i>"OVERSIZE LOAD" HAZARDS</i>	<i>2-1</i>
RAILROAD CROSSINGS	2-2
Driving Procedures	2-2
Gates	2-2
The 15 Second Rule	2-3
Raised Crossings	2-3
Stuck on the Tracks	2-3
Emergencies and Notification of Railroad	2-3
UTILITY LINES	2-4
HEIGHT POLES FOR OVERHEAD MEASUREMENT	2-4
GENERAL DUTIES AND RESPONSIBILITIES	2-6
Front Escorts	2-6
Rear Escorts	2-6
DISTANCES BETWEEN VEHICLES	2-7
Lead Vehicle	2-7
Rear Vehicle	2-7

CHAPTER THREE

HIGHWAY OPERATIONS	3-1
<i>GENERAL PROCEDURES</i>	<i>3-1</i>
<i>GETTING ON THE ROAD</i>	<i>3-2</i>
<i>HIGHWAY OPERATIONS</i>	<i>3-3</i>



One Escort Vehicle.....	3-3
Two Escort Vehicles.....	3-3
Passing a Slower Vehicle.....	3-4
Passing an Obstruction on Shoulder.....	3-5
Two-Lane Bridge.....	3-6
Multi-Lane Bridge, One-Way Traffic.....	3-7
Interstate Interchanges and Clover Leafs.....	3-8
Right Turns at Intersections.....	3-9
Driving Through Town and City Streets.....	3-11

CHAPTER FOUR

FLAGGING AND EMERGENCY OPERATIONS 4-1

FLAGGING..... 4-1

Equipment.....	4-1
Appearance.....	4-1
Flagging Operations.....	4-2
Stopping Traffic.....	4-2
Releasing Traffic/Closed Lane.....	4-2
Releasing Traffic/Open Lane.....	4-2
Slowing Traffic.....	4-3
Two-Flaggers.....	4-3
Single Flagger.....	4-3

ACCIDENT PROCEDURES..... 4-4

Protect the area.....	4-4
Notify authorities.....	4-4
Collect information.....	4-4
Care for the injured.....	4-5

EMERGENCY RESPONSE..... 4-5

Permitted Load Driver Procedures.....	4-5
Escort Driver Procedures.....	4-6
Types of Warning Devices.....	4-7
Examples of Disabled Vehicle/Emergency Response Setups.....	4-7
Hills, Curves and Obstructions.....	4-8
Special Rules.....	4-9

CHAPTER FIVE

SAFE AND DEFENSIVE DRIVING – THE BASICS..... 5-1

APPENDICES

APPENDIX A

<i>ESCORT VEHICLE OPERATOR'S CHECKLIST</i>	A
--	---

APPENDIX B

<i>CONTACT INFORMATION</i>	B
----------------------------------	---

APPENDIX C

<i>SAMPLE PERMIT</i>	C
----------------------------	---



A large, light gray, stylized triangle graphic that serves as a background for the title. It is composed of two thick, slightly irregular lines meeting at a point at the top, with a small gap between them. The lines extend downwards and outwards, framing the text.

Certified **Escort Vehicle** Operator Handbook

A solid, light gray horizontal bar that spans the width of the page, located at the bottom of the title section.

Chapter One



Certified
Escort Vehicle
Operator Handbook

State of North Carolina

**ESCORT VEHICLE OPERATOR
CERTIFICATION PROGRAM**

Program Basics

State of NC Rules

Required Equipment



State of North Carolina EVO Program

PROGRAM BASICS

The North Carolina Department of Transportation (NCDOT) administers a program to certify Oversize /Overweight Load Escort Vehicle Operators as required by G.S. 20 -119, and detailed in 19A NCAC 02D.0644. This program includes instruction in safe and effective escort skills, an examination that verifies course comprehension and a certificate which provides recognition of satisfactory completion of the program. Escort Vehicle Operator (EVO) services benefit all the parties involved in the transportation of over-dimensional loads by:

1. Increasing overall safety of the traveling public.
2. Increasing the safety of the people involved in the movement of the over dimensional load.
3. Preventing damage to the highway system.
4. Preventing damage to the load being transported.
5. Preventing or minimizing delays to the normal traffic flow.
6. Reducing accident/loss rates thereby holding down insurance costs.
7. Encouraging uniform escort operations.

Your safety, the safety of your crew, and the safety of the motoring public are more important than any transporting operation being performed.

Qualifications

Any operator authorized to escort a permitted oversize/overweight load in North Carolina shall make application to NCDOT and be qualified as follows:

1. An escort certified by another state's approved program, or
2. A North Carolina law enforcement officer, or
3. A person who meets all of the following requirements:
 - a) Is at least 21 years of age or 18 years of age with a Class A CDL,
 - b) Possesses a valid driver license without restrictions other than for the use of corrective lenses and has not received a citation for operating a vehicle in a reckless manner or driving while impaired in the previous 12 months;
 - c) Possesses and provides with their application documentation of their completion of a defensive driving course that has been approved by the National Safety Council; and



- d) Has received a certification examination score of at least 75 percent after completing all eight classroom hours of the North Carolina Department of Transportation Oversize/Overweight Load Escort Vehicle Operator Certification Program.

How to Become Certified

The applicant must submit the following documentation to the NCDOT Oversize/Overweight Permit Unit within 6 months of completing the EVO Program course.

1. EVO Certification Application
2. State certified copy of Certified Driving Record
3. Documentation of completion of a defensive driving course that has been approved by the National Safety Council

Upon receipt of all of the above documents and provided that all requirements of the program are met, a certification card will be issued within ten business days. EVO certifications are valid for four years from the date of issue.

How to Become Re-certified

If you have ever held a North Carolina EVO certification, you are eligible to make application to NCDOT to become re-certified by taking the 4-hour re-certification course offered by the NC Community College System. A list of re-certification courses can be found on the Training Calendar on NCDOT OS/OW Permit Unit's website:

<https://connect.ncdot.gov/business/trucking/Pages/overpermits.aspx>

Within 6 months of completing the re-certification course, the applicant must submit an EVO Certification Application to the North Carolina Department of Transportation Oversize/Overweight Permit Unit. If all requirements of the program are met, a certification card will be issued within ten business days.

How to Obtain a Certified Driving Record

Contact the DMV Headquarters located in your state to obtain a Certified Driving Record. North Carolina residents have the option of requesting their driving record online at: <https://edmv.ncdot.gov/DrivingRecords>

Certification Fees

Payment for the EVO Program course is determined by the North Carolina Community College System. The fees for Defensive Driving courses and obtaining a Certified Driving Record vary.

Change of Name/Address & Replacement Certification Card

If you have a change of name or address, or your EVO Certification card is lost, stolen, or destroyed, you may request a duplicate certification card by contacting the NCDOT Oversize/Overweight Permit Unit.



Revocation of Certification

Certification shall be revoked during its effective period for any of the following reasons:

1. Failure to maintain a valid driver license without restrictions other than for corrective lenses;
2. Conviction of driving while impaired;
3. Conviction of reckless driving; or
4. Evidence of unsatisfactory performance while engaged in the duties of oversize -overweight escort vehicle driver.

If certificate is revoked under this section, subsequent certification as an oversize-overweight load escort vehicle operator shall require reapplication, satisfaction of program prerequisites, and requalification through the training program.

Revocation of Certification — Appeal Process

An individual whose certificate is revoked may, within 15 days following notification of the adverse action, make a written appeal to the Secretary of Transportation for review of the revocation. A NCDOT official shall review circumstances surrounding the revocation and make a recommendation. The Secretary may set aside or affirm the loss of the oversize-overweight load escort vehicle certification. The individual appealing will be advised of the final disposition of the action within 21 days following the receipt of the appeal.

STATE OF NORTH CAROLINA RULES FOR OVERSIZE/ OVERWEIGHT LOADS AND ESCORT VEHICLES

A vehicle is considered oversize/overweight if:

Width is greater than eight feet six inches (8'6").

Height is greater than thirteen feet six inches (14').

Weight is greater than 20,000 lbs. (single axle), 38,000 lbs. (tandem axle) Or gross weight greater than the maximum allowable weight according to the federal bridge law.

Length is greater than 40 feet for single vehicle.

Length is greater than 60 feet for a truck/trailer combination.

Length of semi -trailer is greater than 53 -foot when traveling on all roads in North Carolina.

Superloads are a special category of permitted loads. Specific instructions will be dictated on the permit— read it carefully. A superload is defined as:

- Weight in excess of 132,000 pounds gross weight on seven or more axles
- Weight on four or more axle grouping 68,000 pounds
- Width in excess of 16 feet.



OS/OW Loads Requiring an Escort

Oversize/Overweight Permit Unit Policy requires:

1. Front escort for width in excess of 12' for all over-width permitted movement on two lane/two way traffic highways and as a rear escort on multi-lane highways or as determined and stated on the permit documented by issuing agent.
2. Front pole car escort vehicle equipped with a height pole indicator for overheight in excess of fourteen feet five inches (14'5") for entire route of travel.
3. Rear escort for length in excess of 110'. Front and rear escorts are required for overall length in excess of 150'.
4. Rear escort for rear overhang equal to or greater than 15'.
5. Front Escort required for weights in excess of 149,999 pounds.
6. Multiple escorts may be required for a combination of over - dimensions.
7. A total of three escorts for permitted loads in excess of 16' in width, one of which must be from the NC State Highway Patrol.
8. Front Escort required for weights in excess of 149,999 pounds

Additional escorts may be required for any vehicle/vehicle combination with individual consideration of width, length, height, weather, geographical location or route of travel as determined by issuing agent.

REQUIRED EQUIPMENT

Vehicle: Escort vehicle shall be a truck of not less than one -quarter ($\frac{1}{4}$) ton-rated load capacity but not more than 17,000 pounds GVWR or a passenger vehicle of not less than 2,000 pounds gross weight. Escort vehicles are not permitted to pull a trailer of any kind.

Yellow Sign/Banner: Bearing the legend "WIDE LOAD" or "OVERSIZE LOAD" in black 10" x 1 $\frac{1}{2}$ " brush stroke lettering. The banner shall extend the entire width of the escort vehicle bumper. Front escorts shall mount the banner on the front bumper of the vehicle and rear escorts shall mount the banner on the rear bumper of the vehicle.

Flashing Amber Light(s): Rotating or strobe, positioned on top of the escort vehicle, visible for at least 500 feet in all directions by approaching traffic.

Headlights: Escort vehicle headlights must be burning at all times during movement.

Height Pole Indicator: Required for front escort vehicle for overheight loads in excess of 14'5".

Radio: Two-way radio contact with driver of oversize/overweight load and other escort driver(s).



Stop/Slow Paddle: The sign shall be at least 18"x18" with 6 inch high letters, octagonal, and should be mounted on a rigid handle. For more visibility, a 24"x 24" sign size or a high-intensity flashing stop/slow paddle may be used.

Vest/Highvisibilityclothing: Shall wear an approved safety vest, shirt, or coat while flagging. Approved colors are orange, yellow, yellow-green, or fluorescent versions of these colors.

Channelization devices: At least three bi-directional retroreflective triangles, with minimum 17 inch arm length and minimum arm width of 2 inches.

Identification of escort vehicle: Sign showing name and phone number of company and/or owner of escort vehicle must be displayed on each side of escort vehicle. Sign shall be a minimum of 8" x 12" and be readily legible during daylight hours from a distance of 50 feet.

Fire extinguisher: Minimum five lb., Type "BC" or "ABC". It is recommended to use an extinguisher with a metal head.

Certification: Escort vehicle operators must carry their certificate card while escorting a permitted load.

Special Rules: 16' Wide Mobile Homes

16' wide mobile homes are a special extension of oversized permitting rules. While each permit will specifically list the special requirements, in addition to the required equipment, general requirements include:

Travel Times – Monday through Saturday only (plus holiday restrictions), with hours limited to 9 a.m. until 2:30 p.m.

Placement – the vehicle is to travel an average distance of 300' to 500' from the permitted vehicle whichever is appropriate for the geographical location.

Flashing Amber Bar Light(s): Mounted on top of the escort vehicle extending the full width of the vehicle's roof. The use of multiple bar lights will require the lights to be mounted continuously on the roof and connected at the base of the light.

Clear Lens Strobe Lights: Mounted in the front of the vehicle (Ex: in grill or mounted with signal lights) operating while performing the duties of an escort vehicle.

Yellow Sign/Banner: Bearing the legend "WIDE LOAD" or "OVERSIZE LOAD" in black 10" x 1½" brush stroke lettering and include the width of the home (Ex: "OVERSIZE 16' LOAD"). The banner shall be mounted on top of the escort vehicle and extend the entire width of the vehicle.

Red or Orange Flags: 18" X 18" mounted on top of the escort vehicle on each side of the banner.



OPTIONAL EQUIPMENT

A true professional will be prepared for many of the unpredictable situations which may arise on the highway. Some equipment which is not mandated but could be very useful:

Routine Job and Maintenance Items

- ✓ General tool kit with pliers, wrenches, screwdrivers, etc.
- ✓ Motor oil, coolant, water, windshield fluid, etc.
- ✓ Flashlight, batteries
- ✓ Extra "Oversize Load" sign; hardware for attaching sign.
- ✓ Spare amber light unit.
- ✓ Light bulbs – flashers, turn signals, brake lights, headlights
- ✓ Assorted automotive fuses.
- ✓ Jumper cables, shovel
- ✓ Repair/replacement parts for height pole
- ✓ 25 foot tape measure
- ✓ Extra 28 inch traffic cones
- ✓ Radio – handheld two-way for flagging
- ✓ Extra red flags and materials for attaching to the OS/OW load.

Note: Red Flags are not to be used for flagging traffic.
The stop/slow paddle must be used for traffic.

Emergency/Breakdown Items

- ✓ First Aid Kit
- ✓ Latex gloves, CPR breathing shield
- ✓ Aerosol canned tire inflator
- ✓ Cellular phone; numbers if not in 911 area.

Personal Items

- ✓ Drinking Water, lunch
- ✓ Medications
- ✓ Maps – local, state
- ✓ Extra clothing, blanket

Note that these items are generally not required by law. However, having these items in your vehicle can reduce your breakdown time and control costs by having them purchased in advance. More importantly, being prepared for routine and emergency situations shows your professionalism and gives you peace of mind, allowing you to focus on your job.

For convenience, a pre-job checklist is included as Appendix A



A large, stylized gray triangle graphic that serves as a background for the title. It is composed of two thick, slightly irregular gray lines that meet at a point at the top, forming a wide, open triangle. The lines have a subtle texture or grain.

Certified **Escort Vehicle** Operator Handbook

A solid, horizontal gray bar that spans the width of the page, located at the bottom of the title section.

Chapter Two



Certified
Escort Vehicle
Operator Handbook

FUNCTIONS & DUTIES

Oversize Load Hazards

Railroad Crossings

Utility Lines

Height Poles

General Duties



FUNCTIONS AND DUTIES OF ESCORT DRIVERS

“OVERSIZE LOAD” HAZARDS

Each permitted load has its own hazards, depending on whether it is overwidth, overheight, overlength, or overweight. In all cases, the permitted load exceeds the optimum design limits of the highway system. It is the responsibility of each escort vehicle operator to know the dimensions of the permitted load in order to avoid endangering the public and the permitted load. Additionally, the escort vehicle operator must know the limitations of the highway on the route selected for transporting the load.

Overwidth Load Hazards: Overwidth loads are of particular hazard to the motoring public since these loads typically impact the adjacent lanes and roadway shoulders. The motoring public generally does not pay much attention to oncoming traffic until it presents an immediate threat. Drivers do not give up what they consider “their lane” very easily.

When escorting an overwidth load, the escort driver(s) must always be aware of road width and any obstructions, such as narrow bridges and narrow or non-existent shoulders. Weather, particularly rain, may soften roadway shoulders to the extent that they are not usable by an overwidth load. Indications that areas of roadway may “give way” include cracked or crumbling pavement or when large patches of asphalt are observed in road bed fill areas.

Escort vehicle operators should take note of areas of roadway and inform the driver of the load that use of the shoulder may be dangerous. If the permitted load is forced to use more of the oncoming lane, it is the duty of the escort driver to warn the motoring public that an overwidth load is using part of “their lane”.

Overheight Load Hazards: Loads that are overheight must be verified by the escort vehicle operator prior to departure. Drivers should determine actual load dimensions. This is particularly true for overheight loads that could impact bridge or overpass structures that have a variable clearance, depending on the lane selected.

Overlength Load Hazards: Overlength loads are limited to roadways where the load can negotiate curves, interchanges, entrances, and exits to roadways. Overlength loads must be evaluated for railroad crossings to make sure that long loads do not get high-centered.

Overweight Load Hazards: Overweight loads represent a traffic hazard due to their reduced speeds. Whenever permitted loads cannot maintain the speed of the surrounding vehicles and there is a backup of traffic, escort vehicles and transport operators are to pull to the roadside periodically to allow traffic to clear.



RAILROAD CROSSINGS

There are over 6,800 railroad crossings in North Carolina. As a result, the route of oversize/overweight vehicles may include railroad crossings. Both the escort vehicle operator and the oversize/overweight vehicle driver must know the limitations of the highway selected, including whether there are any railroad highway grade crossings and if the oversize/overweight vehicle is required to notify the railroad company prior to crossing.

Driving Procedures

Not all railroad crossings have traffic control devices such as flashing lights, bells and/or gates to warn drivers of an approaching train. Even when traffic control devices are present, do not rely solely on them to warn you of an approaching train. Reduce your speed to a point which would allow the oversize/overweight load to stop short of the tracks if necessary. Then look and listen for any train using the tracks and decide if there is sufficient clear space for the oversize/overweight load to cross safely. Never attempt to race a train to a crossing. It is extremely difficult to judge the speed of an approaching train and the train cannot stop, swerve or turn to avoid a vehicle on the tracks.

Never allow traffic conditions, an intersecting street, a traffic light or a required turn to trap the oversize/overweight load where it is forced to stop on the tracks. It is illegal to drive onto any railroad grade crossing unless there is enough space on the other side to accommodate the vehicle without obstructing the passage of trains on the tracks. Be sure the oversize/overweight load can drive all the way across the tracks before starting across the tracks.

If the oversize/overweight load must stop short of the tracks, be sure to check for traffic behind the vehicle while stopping gradually. The driver should use a pullout lane (if available) and turn on the vehicle's four-way emergency flashers.

When escorting any crawler-type tractor, crane, roller or any equipment or structure having a normal operating speed of five or less miles per hour, notice of any intended crossing shall be given to the superintendent of a railroad company a reasonable amount of time in advance so the railroad company can provide protection to the crossing or any tracks at a railroad crossing. The blue sign will identify the railroad company and the crossing identification will allow the railroad superintendent to know which crossing is involved.

Gates

Many railroad crossings have gates with flashing red lights and bells. If the gates begin to lower while a vehicle is crossing the tracks, the driver must not stop or back up. Instead, the driver must drive through the gate. The gate is on springs and is designed to break away.



The 15 Second Rule

It takes a typical tractor-trailer unit at least 14 seconds to clear a single track and more than 15 seconds to clear a double track. Federal regulations provide that once warning is given by activation of gates, lights, or bells, a train may arrive at the crossing in as little as 20 seconds. The oversize/overweight permit requires the driver of the escort vehicle or the oversize/overweight vehicle to notify the railroad company in advance if the load will require more than 15 seconds to cross the railroad tracks. To notify the railroad, call the telephone number on the blue sign and give the railroad dispatcher the crossing identification number. Do not cross the tracks until the dispatcher says it is safe to do so.

Raised Crossings

Some railroad crossings have steep approaches which can cause the oversize/overweight vehicle to hang up on the tracks. Some, but not all, of these crossings have a low ground clearance warning sign.

If you see this sign approaching a railroad crossing, **DO NOT ATTEMPT TO CROSS**. Even if there is no sign, you still need to inspect the crossing prior to driving the oversize/overweight load over the tracks. One sign of potential problems is scrape marks on the pavement near the tracks. This indicates that other vehicles may have bottomed out while making the crossing. If there is any doubt, **DO NOT ATTEMPT TO CROSS**. Contact the NCDOT Permit Office for a different route.



Stuck on the Tracks

If for any reason an oversize/overweight vehicle gets stuck on the tracks, get everyone out of the vehicle and away from the tracks immediately. This is an emergency situation. Find the blue sign and call the emergency number. **The most important information you can give to emergency personnel is the DOT-AAR crossing identification number.** After the dispatcher has indicated that train traffic has been stopped, call 911 and let them know that assistance is needed. If the blue sign is missing or vandalized and unreadable, call 911, give them the local street address and ask the 911 operator to contact the railroad company immediately.

If a train is coming, run toward the direction from which the train is coming. This will help you to avoid flying glass and debris, which is extremely hazardous in the event of a collision.

Emergencies and Notification of Railroad

Since September, 2015, every railroad is required by federal regulation to participate in the emergency notification system. This system requires that at every location where railroad tracks cross a highway or private



driveway, the railroad company controlling the railroad tracks must post an emergency notification sign. This emergency notification sign is known in the industry as the “blue sign”. The blue sign contains three items:

1. The name of the railroad company controlling the train traffic
2. A toll free emergency telephone number
3. The DOT-AAR crossing identification number

The railroad crossing identification number is a unique address for each railroad crossing in the US and they are always six numbers followed by a letter. See the examples below.



Check signposts at any crossing for the blue sign. Whenever there is a need to contact the railroad, call the number on the blue sign. This will connect the caller directly to the railroad dispatcher. Give the dispatcher the DOT-AAR crossing identification number. The dispatcher can contact the engineers of all trains using the tracks and slow or stop the trains. Contacting the train engineers and stopping the trains may take a few minutes. Stay on the phone with the dispatcher until all trains are stopped. If the blue sign is missing or has been vandalized and is unreadable, call 911 and give the dispatcher the street name and ask them to contact the railroad company immediately.

UTILITY LINES

Utility lines must only be lifted, moved, or otherwise touched by a trained employee of the utility company. **DO NOT ATTEMPT TO MOVE A LINE YOURSELF**; call the power, phone, cable, or other utility company. Many fatalities occur every year because of unqualified persons attempting to move lines themselves.

Treat all wires, cables and utility lines as “HOT” – No exceptions!.

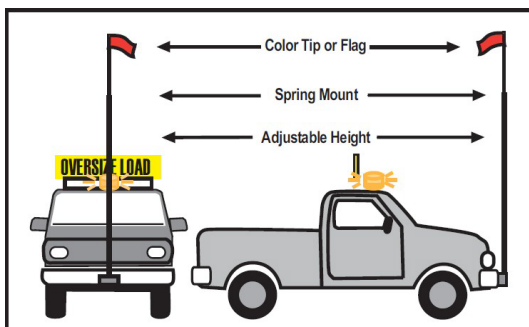
HEIGHT POLES FOR OVERHEAD MEASUREMENT

Overheight loads in excess of fourteen feet five inches (14'5”) are required to have a front pole car escort vehicle equipped with a height pole indicator. The height pole indicator is a device that determines the load clearance for utility lines, traffic signal lights, overpasses and bridges.



The height pole or other measuring device can be used to check the measurements given to you by the load driver. Do not climb the oversize load to measure it!

Height poles and associated mounting hardware are not available in stores, so it is up to the escort driver to build one or have one made. The height pole is to be mounted on the front of the escort vehicle. Once it has been mounted, the height pole should be between three and six inches above the maximum height of the load.



The height pole must be nonconductive in case it were to come into contact with any utility wires. Because of the different overheight loads an escort vehicle will have to lead, the height pole needs to be adjustable. It also needs to be flexible, but not breakable should it come into contact with bridges or overpasses. If the pole does come into contact with a bridge or overpass, it needs to be able to return to the exact height it was before the hit. The height pole should be nondestructive and easy to replace.

Height pole mounts must be strong enough to withstand the wind and any impacts with utility lines, traffic signals, bridges, overpasses etc. The mount must be firm and not affect the pole's position or height.

When not escorting a permitted load, the height pole must be stored. The only exception is when the escort driver is checking the route for any possible obstacles.

The front pole car escort vehicle needs to be well ahead of the load in order to measure any overhead barriers that are on the route. Any problems or other important information should be relayed to the overheight load driver immediately to allow the load driver plenty of time to react to whatever situation is ahead. Follow these guidelines when measuring overhead barriers:

- Measure bridge lanes from their mid -point.
- Measure overhead utility wires and power lines at their lowest point.
- Measure traffic signals to their side. Avoid hitting them as they are fragile and costly to repair.



GENERAL DUTIES AND RESPONSIBILITIES

The purpose of an escort vehicle is to alert the traveling public to the presence or approach of an overdimensional load. Escort drivers are also responsible for assisting the driver of the load and should obey all traffic laws. Specific duties of front and rear escort drivers are given below:

Escort drivers and transporters are NOT exempt from traffic laws and regulations, and Escort drivers do NOT have police powers or permission to operate vehicle as an emergency vehicle while escorting overdimensional loads.

Front Escorts

- Warn oncoming traffic of the presence of the overdimensional load.
- Assist the driver of the overdimensional load by using the two-way radio to provide notification of hazards, obstructions, pedestrians, and other potential problems.
- Check shoulder and alert driver of soft shoulders, ruts, debris, abandoned vehicles, mailboxes, narrowing shoulders, etc.
- Assure the overdimensional driver that the route prescribed on the permit is being followed.
- Watch for construction zones. Lanes may narrow and workers may be close to traffic.
- Locate safe places to allow the overdimensional load and escort vehicles to clear the roadway so traffic following the load can safely pass.
- Warn motorists to stop at the end of narrow structures to permit safe passage of the load through the obstruction.
- Check overhead clearances in the case of overheight loads.
- Flag traffic if necessary.

Rear Escorts

- Warn traffic approaching from the rear of the presence of an overdimensional load ahead.
- Assist the overdimensional load driver by providing notification of flat tires, objects coming loose from the load and other occurrences the driver may not be aware of.
- Monitor top of overheight loads while passing under bridges, wires, etc.
- Notify the front escort driver and overdimensional load operator of traffic buildup and other delays to the normal flow of traffic.
- Notify the overdimensional load driver of motorists attempting to pass the load.



- Warn motorists to stop at narrow structures and other roadway restrictions to permit safe passage of the load through the obstruction.
- Keep driver informed of your location, particularly when the oversized load is to be maneuvered through curves, turns, bridges, and lane changes.
- Flag traffic if necessary.

DISTANCES BETWEEN VEHICLES

There is not a set distance between escort vehicles and permitted loads. Traffic density, road conditions, road type, speed, type of load, and other factors must be taken into consideration. Use your best judgment to determine the best distance based on the conditions and adjust as necessary. Remember that the lead vehicle needs to give the overdimensional load driver enough time to slow down or stop in the event of an obstructed lane, narrow shoulder, stalled vehicle, etc.

Lead Vehicle

- Generally, a separation of 500 feet to $\frac{1}{4}$ mile, depending on conditions.
- On two -lane, two -way roads, remember that you are warning approaching vehicles of the permitted load behind you and they will need time to react. They are closing the distance very rapidly, therefore, you should try to keep $\frac{1}{4}$ mile (approx. 1,300 feet) feet ahead at highway speeds and lesser amounts as speeds slow.
- Inside cities, towns, and in urban conditions, distances will be shorter due to congestion, speed, signals, and other factors. Use a shorter lead distance, usually less than 200 feet.
- On interstates and multi -lane, divided highways, higher speeds require the larger distances ($\frac{1}{4}$ mile), but clear radio contact must be maintained, and in no case should the separation exceed $\frac{1}{2}$ mile.
- When using the height pole to verify clearances for an overheight load, longer distances may be justified.

Rear Vehicle

- A 3 to 4 second following distance should be maintained. These are 4 second following distances:

25 mph	150 feet
30 mph	175 feet
40 mph	250 feet
50 mph	300 feet
55 mph	325 feet
60 mph	350 feet

- In towns, cities, and in urban conditions, smaller distances may be needed to keep other vehicles from getting between you and the permitted load.



A large, stylized gray triangle graphic that serves as a background for the title. It is composed of two thick, slightly irregular gray lines that meet at a point at the top, forming a wide, open triangle. The lines have a subtle texture or grain.

Certified **Escort Vehicle** Operator Handbook

A solid, horizontal gray bar that spans the width of the page, located at the bottom of the title section.

Chapter Three



Certified
Escort Vehicle
Operator Handbook

HIGHWAY OPERATIONS

General Procedures

Getting on the Road

Highway Operations



HIGHWAY OPERATIONS

GENERAL PROCEDURES

Allowing built-up traffic to pass

Escort vehicles and transport operators shall monitor trailing traffic and pull to the roadside periodically to allow lines of traffic to clear. Slow to a maximum speed of 25 mph to allow traffic to pass.

Municipalities

The state of North Carolina (NCDOT) does not operate all roads in the state. When travel is planned on non-state maintained highways, the municipality or other authority that operates the road must be contacted. See appendix B for several of the larger municipalities.

Holiday travel

Permitted vehicles cannot travel on Independence Day, Thanksgiving Day and Christmas Day from noon on the weekday before the holiday until noon on the weekday after the holiday.

Nighttime travel

Transportation of a permitted load is prohibited between sunset and sunrise, unless otherwise stated on permit.

Passengers

No passengers or animals are permitted to travel in the escort vehicle. The only exception is a passenger with an approved escort vehicle operator certification.

Banners, signs, and amber lights

Remove banners, signs, and flags from escort vehicle and turn off amber lights while not escorting a load.

Electronic Devices

Escort vehicle operators are prohibited from the use of any electronic devices except to communicate hazard-related information to the vehicle being escorted. This includes all electronic devices such as cell phones, tablets, computers, MP3 players, DVD players or any non-factory installed device not used for routing.

Speed Limits

Escort vehicles and oversize loads must travel at a speed safe for conditions and not exceed the posted maximum speed, or speed as stated on permit.

Emergency 4-Way Flashers

Not to be used unless speed is less than 40 mph or less than posted minimum speed or unless setting up traffic control for a disabled vehicle or accident as described in Chapter 4 of this manual.



Weather Conditions

Travel should cease if weather conditions do not permit safe movement. Permits are not valid when visibility is less than 500 feet, highway is covered with ice or snow, wind gusts exceed 25 mph, or travel conditions are considered unsafe by the Division of Highways or law enforcement having jurisdiction.

Convoy Travel

Convoy travel is NOT authorized. Permitted vehicles owned or leased by the same company or permitted vehicles originating at the same location shall travel at least 2 miles apart.

Warning: A citation WILL be issued for traveling in a convoy!

GETTING ON THE ROAD

Prior Driving of Route

It is the responsibility of the permittee to check the proposed route and detour when necessary. If you are unfamiliar with the route and are escorting an especially large or overheight load, it is a good idea to pre-drive the route you will be taking. Issuance of a permit does NOT guarantee that the route is safe from hazards. Identify locations requiring extra caution like bridges, RR crossings, intersections, work zones, etc., and develop a plan for safe passage.

Pre-Trip Activities

Good planning and proper preparation of vehicles, equipment, mapping, and communication are essential for a successful day when escorting an oversize load. Take a few minutes to make sure everything is ready to go.

Check Permitted Load

- ✓ Flags properly installed - flags should be attached to the widest points of the load and on any overhangs.
- ✓ Signs/banners properly installed - the sign or banner should be placed on the front and rear of the oversize load vehicle.
- ✓ Flashing amber light installed (for mobile homes and self-propelled vehicles) - rotating or strobe, visible for 500' and 360°.
- ✓ Confirm measurements - double check the measurements of the load before starting.

Check Escort Vehicle

- ✓ Make sure you have all the required equipment described in Chapter One of this manual.
- ✓ Check over things such as fuel, oil, coolant and wiper fluid levels, working condition of headlights, turn signals, break lights and horn, pressure of tires and adjust rear and side mirrors for optimal visibility.
- ✓ Make sure all items are securely stored away on escort vehicle.



Communication equipment and procedure

- ✓ Primary and backup radio channel(s)
- ✓ Phone numbers if cell phones are available
- ✓ Check batteries, adapter cords, etc.
- ✓ Manner of communication: how often to check in with load driver, etc.

HIGHWAY OPERATIONS

One Escort Vehicle

The escort vehicle shall be in full operating mode (headlights on, amber lights flashing, and banner or sign installed properly). Typically, the front escort vehicle should keep a distance of about 500' to $\frac{1}{4}$ mile between it and the load. This distance will change with speed and weather conditions, however, the escort vehicle should never be more than $\frac{1}{2}$ mile ahead of the load. The escort vehicle operator should always drive on the right side of the highway unless trying to clear an obstacle. In this case, the escort vehicle operator may need to move from the lead to the rear in order to “coach” the load driver.

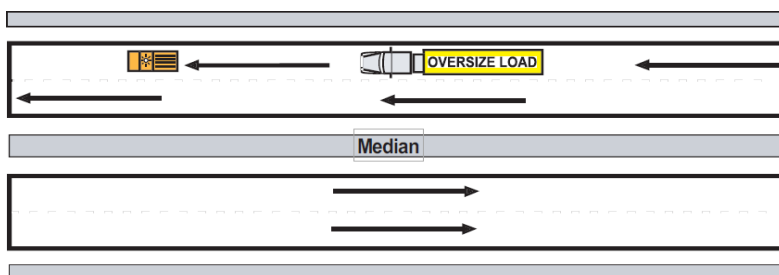


Fig. 1: One Escort Vehicle – Two Lanes

Two Escort Vehicles

When there are two cars escorting a load, the lead escort should follow the same guidelines as described above except that the vehicle will no longer need to move to the rear because an escort is already there.

The rear escort vehicle should be in full operating mode as described above. The role of the rear escort vehicle is to keep an eye on the load and contact the load driver by radio if there are any problems. The rear escort vehicle needs to maintain a following distance of 3 to 4 seconds. This distance will increase if there are adverse weather conditions. The rear escort vehicle operator must also drive on the left hand side of right lane. The load driver will be driving with the right front fender even with the white edge line unless there are obstacles on the shoulder. The rear escort driver must never get into the load driver's blind spot. It is the responsibility of the rear escort driver to tell the load driver and lead escort driver of any vehicles that will be passing.



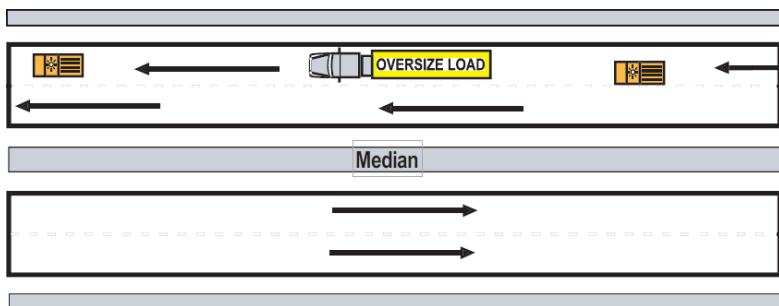


Fig. 2: Two Escort Vehicles – Two Lanes

Passing a Slower Vehicle

The lead escort vehicle operator must inform the team of the slow - moving vehicle. It is the responsibility of the lead escort driver to make sure that all of the following vehicles have enough clearance to get past the slow moving vehicle. The slow moving vehicle must not get caught between the load and an escort vehicle.

Extreme caution must be taken when passing a slower vehicle with an "Oversized Load."

When the load driver confirms his/her intent to pass the slow-moving vehicle, the rear escort vehicle shall move into the passing lane to keep traffic from passing and to allow the load to move into the passing lane. Once the rear escort vehicle is in position, the operator shall radio to the load driver which way to move and how many lanes. Once the load has cleared the slower vehicle, the rear escort operator shall radio the load driver to move back into the original lane. The permitted load driver should never change lanes until the rear escort operator has informed him/her by radio that it is okay.

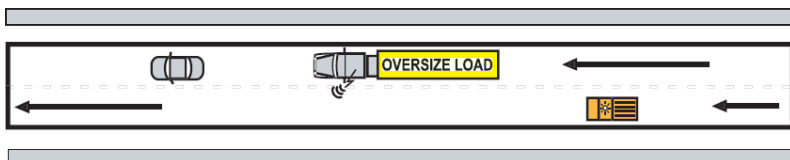


Fig. 3: Permitted driver radioes escort vehicle operator(s) of intentions to pass slow-moving vehicle.

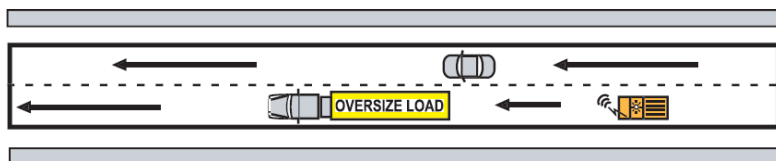


Fig. 4: Rear escort vehicle operator radioes permitted load driver: "you are clear to move left one lane".



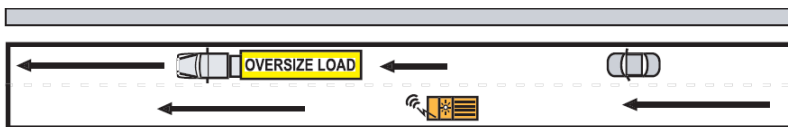


Fig. 5: Rear escort vehicle operator radioes permitted load driver: “you are clear to move right one lane”.

Passing an Obstruction on Shoulder

If there is an obstruction on the shoulder that could impact the load, the lead escort vehicle operator will radio the team specifically how far off of the white line the obstruction is.

(EX): “There is a car on the shoulder, two feet off of the edge line. Move one lane left.”

The lead escort vehicle will move to the left and stay there until the load has passed the obstruction. The rear vehicle escort operator will move one lane to the left as soon as the lead escort vehicle operator has radioed the message about the obstruction. Once the rear escort driver has blocked traffic from passing, the load driver must be notified by radio that it is clear to move to the left and pass the obstruction. When it is clear, the rear escort driver will radio the load driver to move back to the right lane.

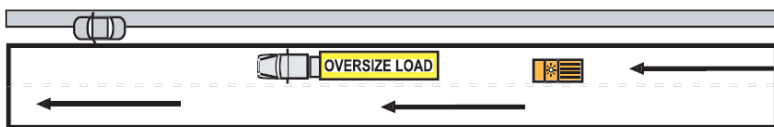


Fig. 6: Lead vehicle has radioed permitted load driver of hazard on shoulder and has moved to the left lane. Rear escort vehicle prepares to move to the left lane to keep traffic from passing.

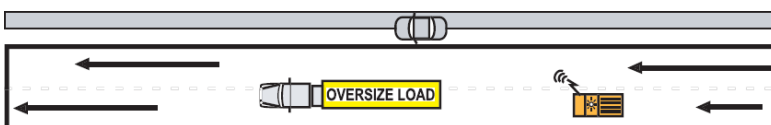


Fig. 7: Rear escort vehicle operator radioes permitted load driver: “it is clear to move left one lane”.

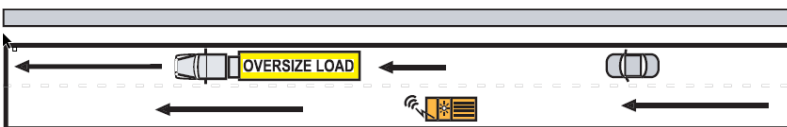


Fig. 8: Rear escort vehicle operator radioes permitted load driver: “it is clear to move right one lane”.



Two-Lane Bridge

When an oversize load must cross a two-lane bridge with two-lane traffic, traffic must be stopped to allow the load to pass through. The front and rear escort vehicles must control the traffic.

The lead escort vehicle operator must cross the bridge and wait until there is a break in traffic before attempting to stop oncoming traffic. Position your escort vehicle at an angle with your STOP sign displayed outside of the window. Do not hold the sign outside of your window with the vehicle moving. You can get the attention of distant motorists by flashing your high-beams and using your emergency flashers and amber light. You should also inform other truckers with your CB radio that the bridge will be shut down. Be prepared to move in case the traffic coming at you does not stop. If oncoming traffic does not stop, radio the load driver about the situation. You may have to wait several minutes before traffic will stop. Once you have stopped traffic, radio the permitted load driver and the rear escort vehicle operator that it is clear to cross after the last car passes. Be sure to include the color and make of the last car.

The rear escort vehicle operator should stop traffic behind the escort vehicle and the permitted load so that they do not hit the lead escort vehicle on the other side. If a vehicle goes around the rear escort vehicle, the load driver and lead escort vehicle operator must be informed immediately. The traffic that has been stopped behind the rear escort vehicle may proceed as soon as the load has cleared the bridge. The permitted load and rear escort vehicle may cross the bridge once the lead escort vehicle operator has said that it is clear and the last car has crossed the bridge. The oversized load should drive in the center of the road while crossing the bridge. The oversized load should not move until the lead and rear escort vehicle operators have said it is clear. The rear escort vehicle will “coach” the load driver across the bridge by making sure that the load driver has enough clearance on both sides of the load and above if the load is overheight and the bridge is covered.

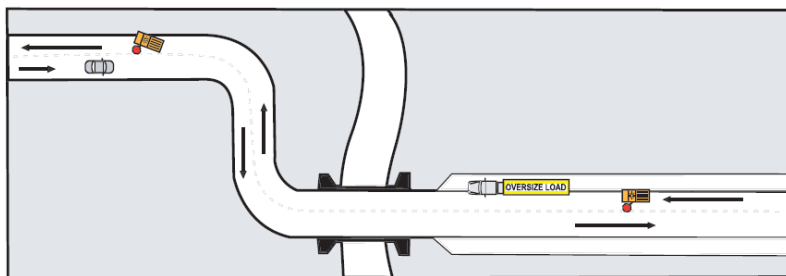


Fig. 9 : Lead escort vehicle must cross bridge, proceed to open spot, and stop oncoming traffic. Permitted load waits until lead driver radios that it is safe to cross.



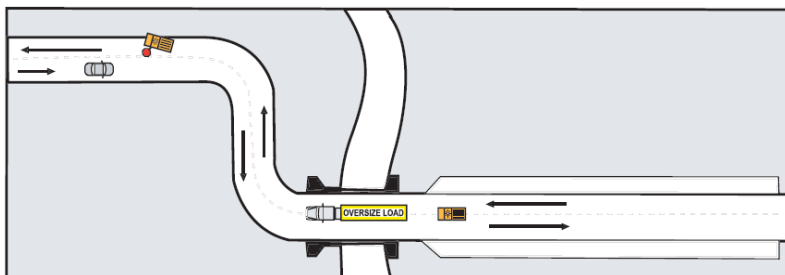


Fig. 10: Lead escort driver gives radio signal that they have traffic stopped and it is okay for permitted load to cross bridge.

Multi-Lane Bridge, One-Way Traffic

The lead escort vehicle operator informs the team of the obstacle and advises the load driver to move left. The rear escort vehicle operator will move left to block traffic from passing the load and inform the load driver when it is all clear for the load to move to the left. The load driver will drive in the center of the road and will be “coached” by the rear escort vehicle operator. The rear escort vehicle will move back to the right and inform the load driver when it is all clear to move back to the right.

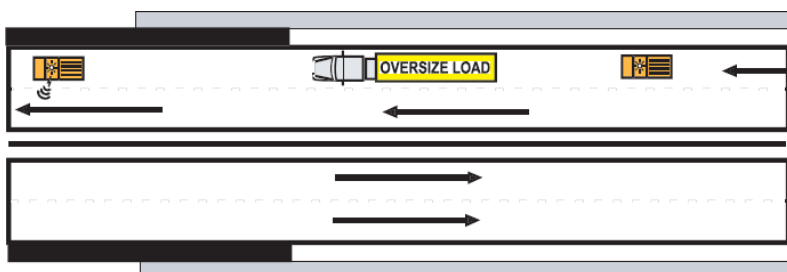


Fig. 11: Multi-lane bridge, one-way traffic — lead escort vehicle operator requests permitted load driver to “move left one lane.”

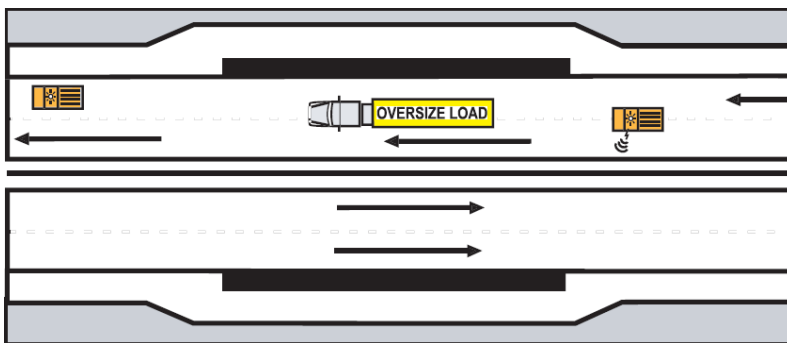


Fig. 12: Rear escort vehicle operator moves to left lane to block traffic from passing the load and informs permitted load driver: “clear to move left one lane”.



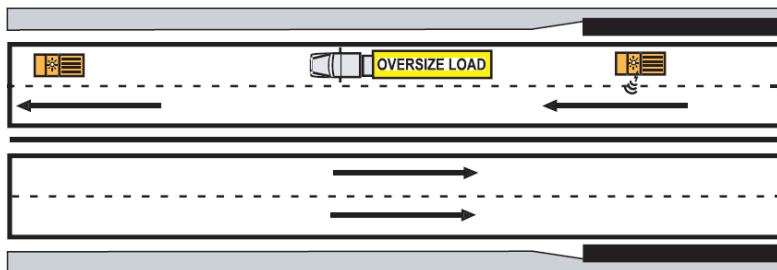


Fig. 13: Once bridge has been cleared, rear escort vehicle operator informs permitted load driver: “clear to move right one lane right”.

Interstate Interchanges and Clover Leafs

The front and rear escort vehicle operators are responsible for guiding the oversized load through an interchange. The operators must keep the load from being damaged or crashing into merging traffic.

The lead escort driver must remain close to the load when entering an interchange. The lead escort vehicle must enter at a low speed to warn traffic that the oversized load will be merging and continue to use caution while merging onto the highway at regular speed. The rear escort vehicle operator must monitor the swing of the load to make sure that it is not going to hit any roadside obstructions and relay any important information about this to the load driver.

The rear escort vehicle should enter the highway first and radio the lead escort driver and load driver when it is clear to move one lane left. While merging onto the freeway, the rear escort driver should keep other motorists from getting between it and the permitted load.

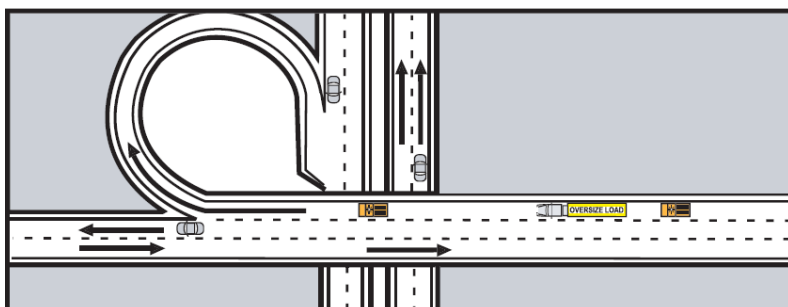


Fig. 14: Stay close to the permitted load.



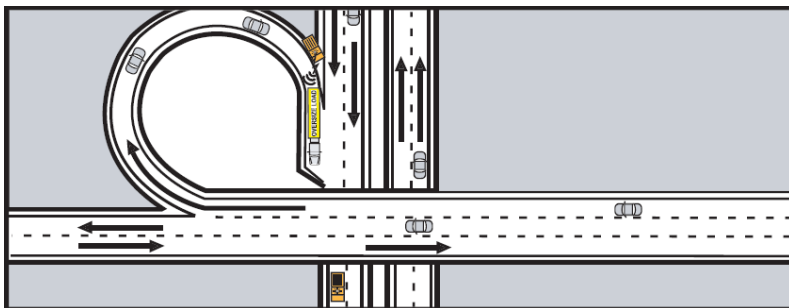


Fig. 15: Rear escort vehicle monitors clearances.

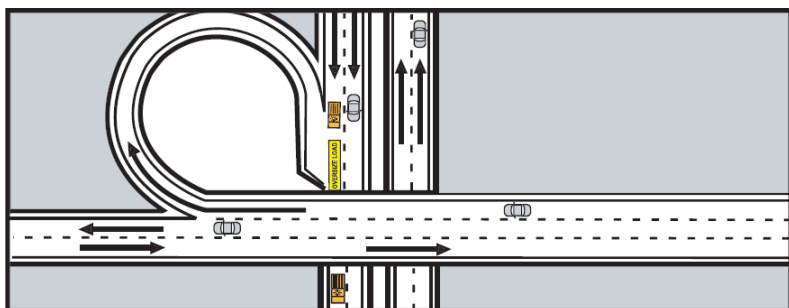


Fig. 16: Rear escort vehicle informs permitted load driver when it is safe to merge.

Right Turns at Intersections

Escort vehicle operators must protect motorists while the oversized load maneuvers through the intersection. The lead escort vehicle will make the turn so that motorists can be warned that the load is going to take up part of their lane. The lead escort vehicle operator will watch the right inside to make sure the load does not hit any obstructions. The permitted load will need to make sure their right turn signal is on and swing left in order to make the turn. Once the front of the load meets up with the lead escort vehicle, normal leading distance should resume. The rear escort vehicle operator must watch the swing of the load to make sure it does not hit anything. The rear escort vehicle must also keep motorists from getting between the load and the curb or other roadside obstacles. The permitted load drivers should watch for motorists trying to get between the load and an escort vehicle or the curb too. If any motorists move to the inside lane to try and get by the load, the load driver must be notified immediately to stop the load until the motorist has passed.



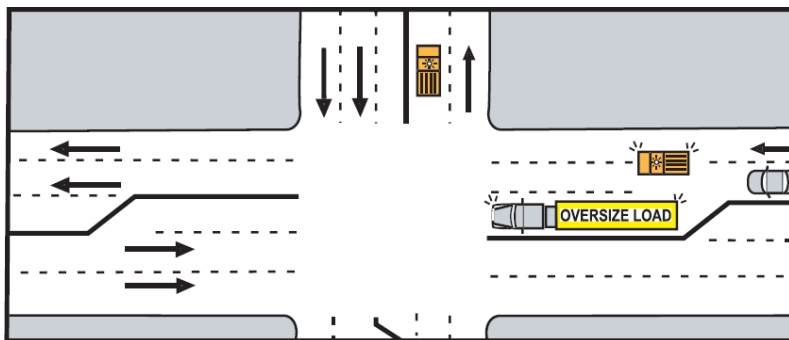


Fig. 17: Lead escort vehicle proceeds through intersection to warn motorists of wide turns.

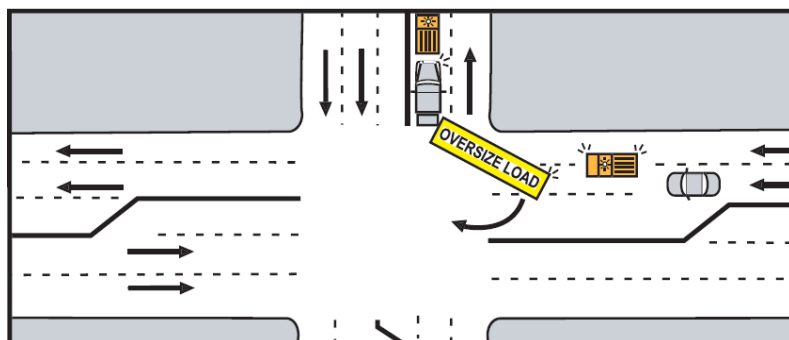


Fig. 18: Permitted load swings wide as rear escort vehicle monitors.

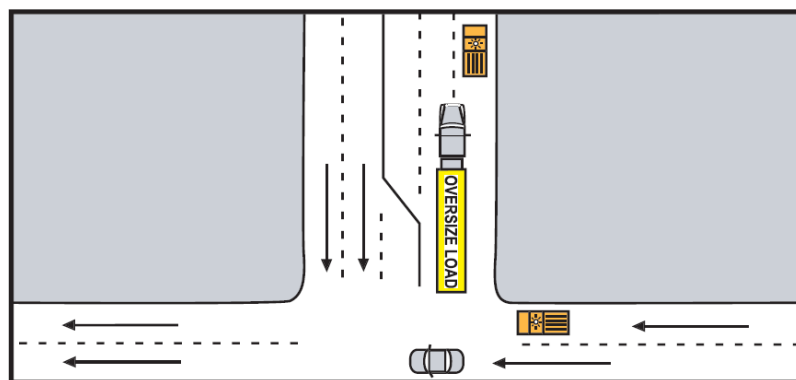


Fig. 19: Lead escort vehicle moves to right lane as permitted load clears intersection.



Driving Through Town and City Streets

Extreme caution must be taken when escorting an oversize load through a town or city. Potential hazards include pedestrians, car doors being opened from parked cars on the street and motorists trying to get around you. The public is not aware of the drastic movements that have to be made in order to avoid some of the hazards. For example, you may have to drive on the wrong side of the road in order to get around traffic lights, signs, and other overhead obstacles.

If the load is overheight, low utility wires, lights and low hanging signs are all obstacles that the load driver and escort vehicle operators must be aware of at all times. The lead escort vehicle operator should run the height pole to check overhead clearances. The load driver should watch the height pole on the lead escort vehicle to see if it hits any of the overhead obstacles. Sometimes the load may have to split between obstacles such as traffic lights to avoid hitting them. Other times, the load will have to drive around an obstacle. If this is the case, the lead escort vehicle operator must stop oncoming traffic far enough from the signal so that the load can clear all of the lights. The lead escort vehicle must not leave the load so far behind that it is unsure if it can clear an intersection.

The rear escort vehicle operator must be in a position where the wires and traffic signals can be seen and must notify the load driver to stop immediately if the load is about to hit something. The back corner on the side that has the highest peak of the load is usually the best place to be in order to tell the load driver which way to move and if the light changes. If the load must go around signal lights or dodge a wire, and it involves getting onto the wrong side of the road, then the rear escort vehicle operator must hold traffic until the load is back in the proper lane of travel. Do not let traffic pass while the load is moving under obstacles.

The rear vehicle operator must also keep an eye on the traffic behind the load. If traffic is backed up too much, a motorist could get impatient and make a dangerous move. If there is a long line, the rear operator must let the load driver and lead operator know and a decision must be made on the best way to allow the traffic to pass.

The oversize load should drive on the lane divider line when driving on town or city streets. This will lessen the chance of the load hitting parked cars and it will help prevent motorists from trying to pass. The load driver should contact the lead escort vehicle if any motorists come between the load and the lead escort.

All traffic signals must be obeyed. If the lead escort vehicle makes it through an intersection and the load does not, then the lead escort vehicle should pull safely off to the right and wait until the signal changes. If the rear escort vehicle operator has to stop at the intersection, the load driver and the lead vehicle operator should be informed and the load driver should slow down and wait for the rear escort to get back into position so that the back of the load is protected.



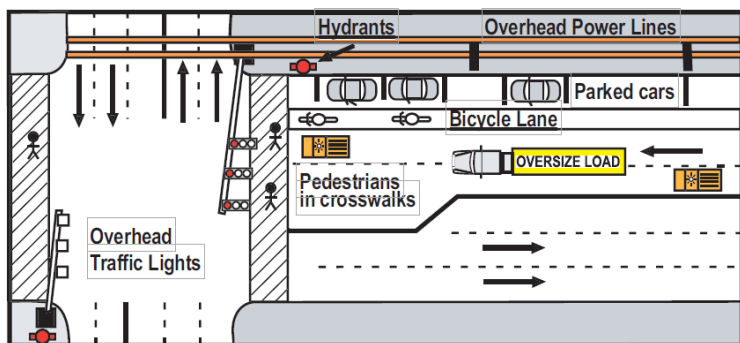


Fig. 20: Driving through town and city streets presents more hazards than in rural areas.

A large, stylized gray triangle graphic that serves as a background for the title. It is composed of two thick, slightly irregular gray lines that meet at a point at the top, forming a wide, open triangle. The lines have a subtle texture or grain.

Certified **Escort Vehicle** Operator Handbook

A solid, horizontal gray bar that spans the width of the page, located at the bottom of the title section.

Chapter Four



Certified
Escort Vehicle
Operator Handbook

EMERGENCY OPERATIONS

Flagging

Accident Procedures

Emergency Response



FLAGGING AND EMERGENCY OPERATIONS

FLAGGING

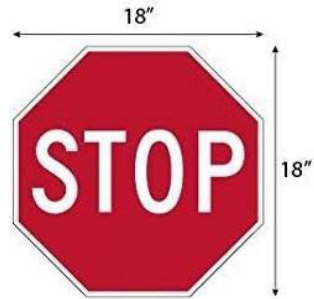
An escort driver must periodically stop or control traffic in order to allow loads to enter the highway, go through narrow sections, change tires, etc. Flagging traffic helps to protect the lives of workers, guide traffic safely and avoid unreasonable delays to motorists. Flaggers should be prepared to answer any questions with courtesy and professionalism.

Flagging traffic is a **NORMAL** part of operations — proper equipment and procedures must be used.

Equipment

The main traffic control device is the STOP/SLOW paddle. It shall be at least 18" x 18" with 6" high letters, octagonal, and should be mounted on a rigid handle. For portability, a 1' handle may be used, but if mounted on a long staff, a 7' mounting height is recommended.

To make the paddle more visible, a larger sign size or a high-intensity flashing STOP/SLOW paddle may be used.



Appearance

To assure motorist respect, flaggers should maintain a clean, neat appearance.

- An approved safety vest, shirt or coat shall be worn. Approved colors are orange, yellow, yellow-green, or fluorescent versions of these colors.
- A brightly colored hat is recommended as it will make the flagger more visible to motorists.
- Safe and appropriate footwear should be worn.
- Music playing devices and books are not permitted.

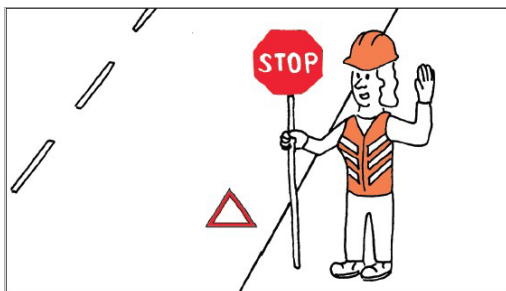


Flagging Operations

Always stand in a safe position on the shoulder facing traffic and have an escape route. NEVER stand in the path of oncoming traffic and never turn your back on traffic.

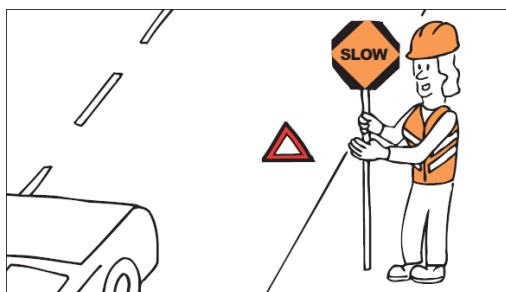
Stopping Traffic

Hold the paddle away from your body with the STOP sign facing traffic and the sign on or near the edge of the pavement. Raise your free hand with the palm exposed to the approaching vehicle and make eye contact with the driver. Change to STOP only if an approaching vehicle has plenty of distance to gradually stop. Avoid screeching halts.



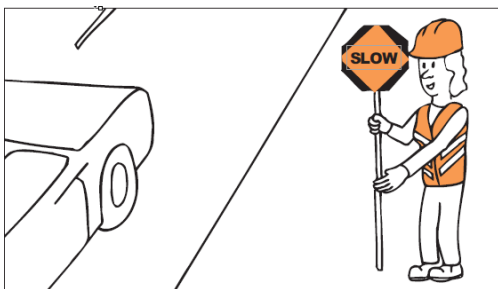
Releasing Traffic/Closed Lane

Standing on the shoulder of the closed lane with your paddle turned to STOP, you must wait for an “all clear” signal from the other flagger before you release your traffic. Once the “all clear” is received, you may release your traffic by turning the paddle to show the SLOW sign. Then with your free arm, signal drivers to proceed into the open lane. Be direct and point to the open lane.



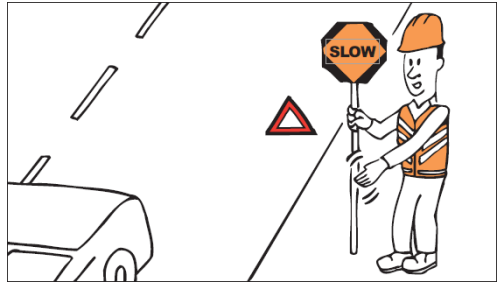
Releasing Traffic/Open Lane

Standing on the shoulder of the open lane with your paddle turned to STOP, wait for the “all clear” signal. Once the signal is received, you may release your traffic. First take a step or two back from the edge of the pavement and turn the paddle to SLOW. Then, with your free arm, signal drivers to proceed in the open lane. Be direct and clear with your hand signal.



Slowing Traffic

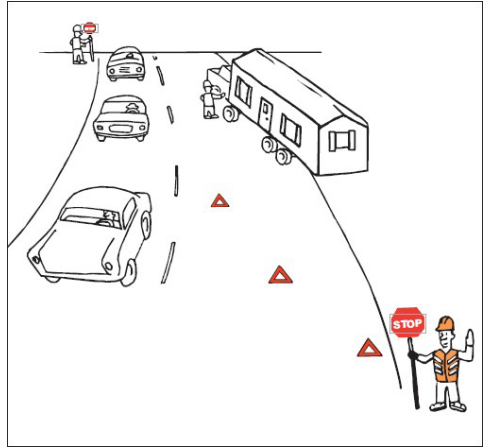
Stand on the shoulder facing traffic. With the SLOW sign showing, slowly raise and lower your left arm with the palm facing down in front of your paddle.



Two-Flaggers

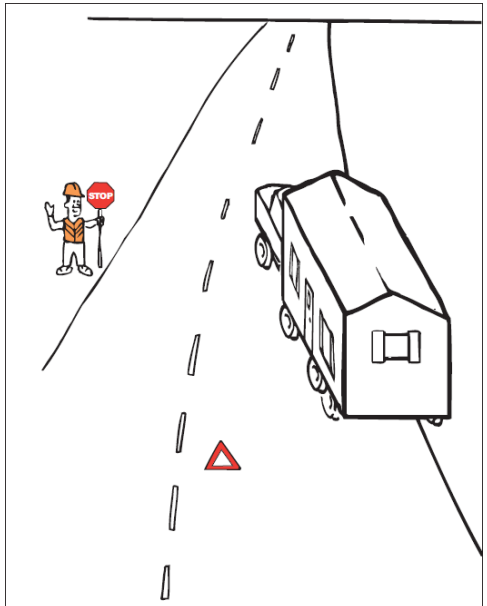
This operation uses a flagger on each end of the stretch of road needing traffic control. This is the most common method of flagging traffic. One flagger should be designated as the lead flagger for coordinating the operation. To be effective, flaggers must always be able to communicate with one another. Communication can be maintained by:

- Visual contact – effective when flaggers are close enough so they can read each other's STOP/SLOW paddles and see each other's "all clear" signals.
- Two-way radio – the best means of communication, even when there is visual contact.
- Flag carrying – (only if radios do not work) the driver of the last vehicle passes a flag/token from one flagger to the other.



Single Flagger

When only a short, straight stretch of a low-volume road needs to be controlled, a single flagger may sometimes be used. The flagger must be visible to both directions of traffic. Standing on the shoulder opposite of the disabled oversized load, the flagger directs traffic with the STOP/SLOW paddle.



ACCIDENT PROCEDURES

If you or one of your crew is involved in an accident and not seriously hurt, you need to act to prevent further damage or injury. The first thing to do at an accident scene is to keep another accident from happening at the same spot. The basic steps to be taken at any accident are: (1) Protect the area (2) Notify authorities (3) Collect information (4) Care for the injured. Report the accident IMMEDIATELY if a person has been seriously injured or killed.

Protect the area

- If your vehicle is involved in the accident, try to get it to the side of the road. This will help to prevent another accident and allow traffic to move past.
- If you are stopping to help, park away from the accident. The area immediately around the accident will be needed for emergency vehicles.
- Put on your flashers.
- Set out reflective triangles to warn other traffic. Make sure they can be seen by other drivers in time for them to avoid the accident.

Notify authorities

- Once the area has been properly protected, call 911. If you are unable to make the call yourself, specifically instruct someone else to make the call.
- Try to determine exactly where you are using mile markers, exits, landmarks, etc. so you can give the dispatcher the correct location.
- Report damage to stop signs, warning signs, traffic signals, etc.

Collect information

- When all involved parties are able, exchange information. Get name and address of other driver(s).
- Get the name and address and policy number of the insurance company of the other owners/drivers. Always carry your own insurance information when driving.
- Make a reasonable effort to find the owner or caretaker of an unattended vehicle or other unattended property, which may be damaged. If you cannot find the owner or caretaker, you must leave a note that can be easily found at the scene of the accident. This information should include the driver's name, address, driver license number, license plate number, date and time of accident, and an estimate of the property damage. In addition, report the accident in writing within 24 hours to the Highway Patrol or Police Department of the municipality involved.



Care for the injured

- If a qualified person is at the accident and helping the injured, stay out of the way unless asked to assist. Otherwise, do the best you can to help any injured parties.
- Don't move a seriously injured person unless the danger of fire or passing traffic makes it absolutely necessary.
- Stop heavy bleeding by applying direct pressure to the wound.
- Keep the injured person warm.

EMERGENCY RESPONSE

The following information is based off of Title 49 - Subtitle B - Chapter III - Subchapter B - Part 392 - Subpart C of the Federal Motor Carrier Safety Regulations Handbook which outlines the proper procedures for stopped commercial motor vehicles.

Permitted Load Driver Procedures

If the permitted load has to stop on the traveled portion of a highway or the shoulder of a highway for any reason other than necessary traffic stops, the permitted load driver should immediately activate the hazard lights and place warning devices within ten minutes after the load has stopped. As a general rule, warning devices should be placed in the following manner:

- One on the traffic side of and 4 paces (approximately 3 meters or 10 feet) from the stopped commercial motor vehicle in the direction of approaching traffic;
- One at 40 paces (approximately 30 meters or 100 feet) from the stopped commercial motor vehicle in the center of the traffic lane or shoulder occupied by the commercial motor vehicle and in the direction of approaching traffic;
- One at 40 paces (approximately 30 meters or 100 feet) from the stopped commercial motor vehicle in the center of the traffic lane or shoulder occupied by the commercial motor vehicle and in the direction away from approaching traffic.

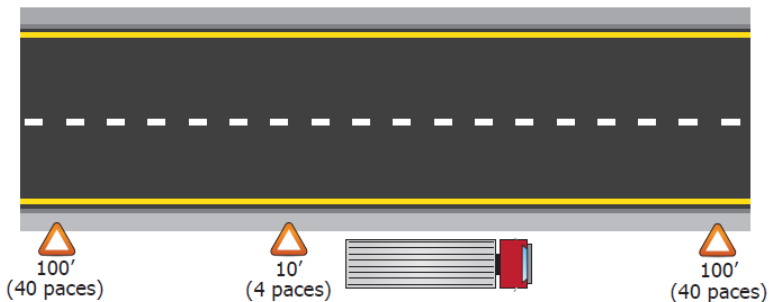


Fig. 1: Two way, two-lane highway



If the permitted load is stopped upon the traveled portion or the shoulder of a divided or one-way highway, the permitted load driver shall place all three warning devices in the direction of approaching traffic in the center of the lane or shoulder on the traffic side of the load in the following manner: One warning device at a distance of 100 feet, one warning device at a distance of 100 feet and one warning device at a distance of 200 feet from the rear of the permitted load.

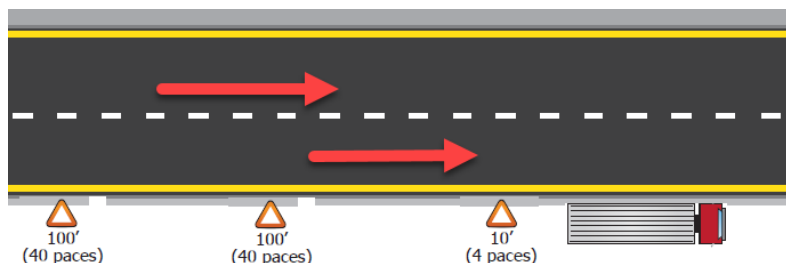


Fig. 2: Divided/One-way highway

Escort Driver Procedures

If the permitted load has to stop on the traveled portion of a highway or the shoulder of a highway for any reason other than necessary traffic stops, the escort vehicle operator should immediately activate the vehicle's hazard lights and place the warning devices. *Warning devices must be in place within ten minutes after the permitted load and escort vehicles have stopped.* Once the warning devices have been placed, stay clear of the roadway. The escort vehicles' hazard lights should remain on until the load is ready to move again and the warning signals have been picked up for storage.

Give approaching traffic as much advance warning as possible. This can be accomplished by using warning devices and the escort vehicle itself with its flashing amber light. Use the same spacing methods as the permitted load driver to direct the flow of traffic around the stopped load.

Be sure to contact local authorities as soon as possible to report the accident. If the load or accident is encroaching on traffic, call 911 and ask the dispatcher to notify the operator of road (NCDOT or the local municipality). **DO NOT** attempt to repair or tow vehicles until more help (NCDOT or State Highway Patrol) arrives. Have all movable people get as far from the road and traffic as possible.

If flagging is necessary, use proper flagging procedures as defined in the first section of this chapter.



Types of Warning Devices

One of the following three options must be used:

- (1) Three bidirectional emergency reflective triangles that conform to the requirements of Federal Motor Vehicle Safety Standard No. 125, Sec. 571.125 of Title 49
- (2) Six fusees (each capable of burning for at least 30 minutes)
- (3) Three liquid burning flares (each containing enough fuel to burn continuously for at least 60 minutes)

Other warning devices may be used in addition to, but not in lieu of, the required warning devices, as long as those warning devices do not decrease the effectiveness of the required warning devices.

No driver shall attach or permit any person to attach a lighted fusee or other flame-producing emergency signal to any part of a commercial motor vehicle. No emergency warning signal producing a flame shall be lighted or placed if gasoline or any other flammable liquid, or combustible liquid or gas seeps or leaks from a fuel container or a commercial motor vehicle stopped upon a highway.

Examples of Disabled Vehicle/Emergency Response Setups

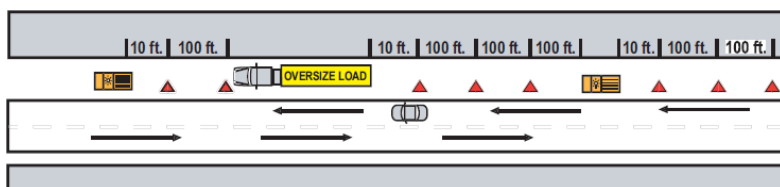


Fig. 3: Two-lane, two-way highway with disabled vehicle more than 2' off the shoulder (two escort vehicles).

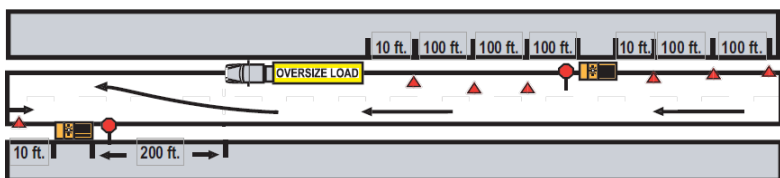


Fig. 4: Two-lane, two-way highway with lane encroachment (two-flagger operation)



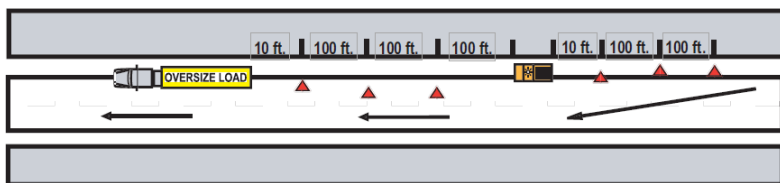


Fig. 5 Multi-lane highway with lane encroachment (one escort vehicle).

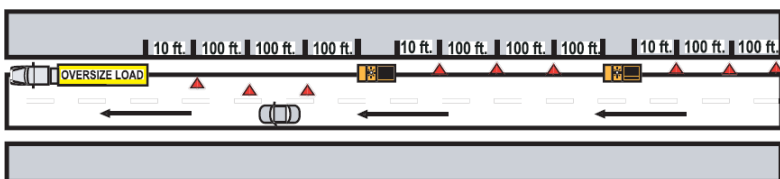


Fig. 6: Multi-lane highway with lane encroachment (two escort vehicles).

Hills, Curves and Obstructions

If a commercial motor vehicle is stopped within 500 feet of a curve, crest of a hill, or other obstruction to view, the load driver shall place the warning signal in the direction of the obstruction to view a distance of 100 feet to 500 feet from the stopped commercial motor vehicle so as to afford ample warning to other users of the highway.

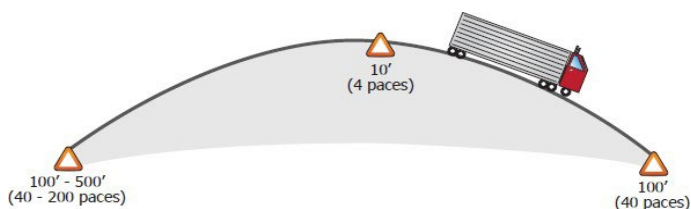


Fig. 7: Disabled vehicle on hill more than 2' off the shoulder

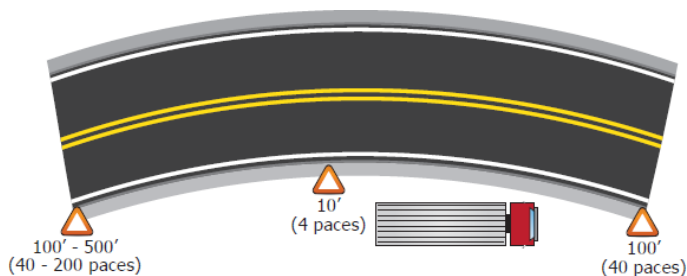


Fig. 8: Disabled vehicle in a curve more than 2' off the shoulder.



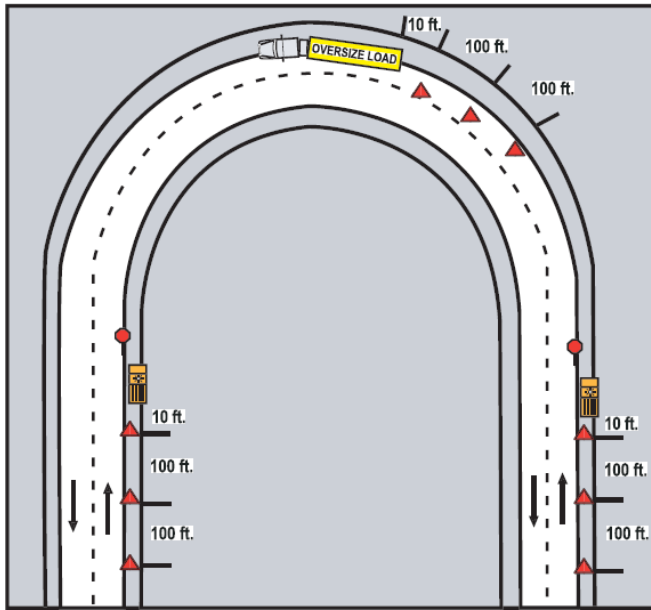


Fig. 9: Disabled Vehicle in a curve with lane encroachment (two-flagger operation).

Special Rules

The placement of warning devices is not required within the business or residential district of a municipality, except during the time lighted lamps are required and when street or highway lighting is insufficient to make a commercial motor vehicle clearly discernible at a distance of 500 feet to persons on the highway.



A large, light gray, stylized triangle graphic that serves as a background for the title. It is composed of two thick, slightly irregular lines meeting at a point at the top, with a small gap between them. The lines extend downwards and outwards to the edges of the frame.

Certified **Escort Vehicle** Operator Handbook

A solid, light gray horizontal bar that spans the width of the page, located at the bottom of the title section.

Chapter Five

Certified
Escort Vehicle
Operator Handbook

SAFE AND DEFENSIVE
DRIVING



SAFE AND DEFENSIVE DRIVING – THE BASICS

Introduction

Escort vehicle operation involves many risks. It is managing those risks that is so important. The definition of risk is the chance of any injury, damage or loss to property. These are the factors most frequently associated with vehicle escort operations and incidents.

Driver Inattention and Fatigue

Cell phones, radio, talking to passenger

Speeding

Unsafe and imprudent speed for safe driving conditions

Disregard of Traffic Control Devices and Signs

Inattention to traffic control devices and signs

Driving while impaired

Impaired driving, prescription and unlawful drugs, alcohol

Unsafe vehicle movements and failure to yield right of way

Inattention to other vehicles, backing, unsafe start and yield right of way

Vehicle Safety Violations

Equipment defects, safety restraints, tire traction, brakes and steering

MANAGING RISK

Risk is always present during any vehicle escort operation driving task.

Perceived Risk differs from actual risk.

Risk can be shared by more than one vehicle escort operator.

Risk can be altered by one or more vehicle escort operators.

FACTORS TO REDUCE RISK

- **Risk can be reduced** by defensive and safe driving operations at all times.
- **Risk can be reduced** by making sure all escort vehicles are properly maintained.
- **Risk can be reduced** by all vehicle escort operators being properly trained.
- **Risk can be reduced** by all vehicle escort operators communicating with each other and the load transporters, law enforcement personnel and the North Carolina Department of Transportation Oversize/ Overweight Permit Unit.



SEEING & SCANNING

- A. Establishing a safe and visual lead between other vehicles while driving.
- B. Seeing and checking from behind the vehicle using a proper sequence of mirror and head checks.
- C. Checking to the sides, looking in both directions, looking both ways at intersections to be absolutely sure the path is clear of vehicles, trains and pedestrians.
- D. Compensating for driver, vehicle and environmental factors to improve seeing while operating a motor vehicle.

COMMUNICATION & TRAFFIC CONTROL DEVICES

- A. Road signs and traffic control devices communicate to all vehicle operators of the hazards and warnings of roadways and highways.
- B. Other vehicle operators communicate to each other to warn of roadway emergencies and roadway hazards.
- C. Aggressive driving by other vehicle operators communicate the risk of their aggressive driving behavior to you warning you.
- D. Law enforcement personnel and state laws communicate to us about the risk of not operating a motor vehicle safely.

ADJUSTING SPEED

- A. Operators have to adjust their speed well below the posted speed limit in many cases to drive safely.
- B. What you can see and what you can't see should influence your choice of speed.
- C. Operators should be aware of traffic conditions that could influence safe speed for driving.
- D. Roadway and pavement surfaces and tire traction limitations should determine the speed of the operator. Speed limit means the maximum speed under ideal conditions.

MARGIN OF SAFETY

- A. The vehicle escort operator can best control the space in front of their vehicle by using safe and prudent following distances.
- B. Correct lane positioning of the escort vehicle enables you to minimize dangers from the left or right side.
- C. Defensive driving and safe following distances will reduce tailgating accidents and hazards.
- D. Determining a margin of safety distance between other vehicles and objects will reduce lane passing accidents and hazards.



DRIVING EMERGENCIES

- A. Escort vehicle operators should be able to safely and properly change a tire and determine basic mechanical failures on their vehicle.
- B. Escort vehicle operators can best avoid accidents and skidding by not hydroplaning and by using proper braking, steering and by decreasing their vehicle speed.
- C. Antilock braking systems (ABS) brakes, will reduce the vehicle from hydroplaning, in addition to proper steering and by reducing speed.
- D. Safety belts and restraints can help prevent an accident and when combined with safe vehicle escort operations can also protect you in an accident. Proper seat and head positioning is also a factor.

IMPACTING FACTORS

- A. Escort vehicle operators should have proper rest and sleep before operating any vehicle or performing any task.
- B. An escort vehicle operator can be affected by emotions that can impair safe vehicle operations and judgment
- C. Consuming any alcohol or drugs is extremely dangerous before and during any vehicle operation or escort vehicle operation.



A large, light gray, stylized triangle graphic that serves as a background for the title. It is composed of two thick, slightly irregular lines meeting at a point at the top, with a small gap between them. The lines extend downwards and outwards to the edges of the frame.

Certified **Escort Vehicle** Operator Handbook

A solid, light gray horizontal bar that spans the width of the page, located at the bottom of the title section.

Appendices



Certified
Escort Vehicle
Operator Handbook

EVO Checklist

Contact Information

Sample Permit



APPENDICES

Appendix A

ESCORT VEHICLE OPERATOR'S CHECKLIST

Oversize/Overweight Load Information	
OSOW Permit Number:	Description of Load:
Load Driver's Name:	Load Driver's Phone Number:
Primary Radio Channel:	Back-Up Radio Channel:

Required Equipment	
Escort Vehicle	Vest/High Visibility Clothing
OS/OW Sign or Banner	Fire Extinguisher
Flashing Amber Lights	Identification on side of escort vehicle
Radio	Height Pole Indicator (for loads where height exceeds 14'5")
Stop/Slow Paddle	Escort Vehicle Operator Certification Card
Channelization Devices (minimum of 3 triangles or liquid flares OR minimum of 6 fusees)	

16' Wide Mobile Home Additional Required Equipment	
Flashing Amber Bar Lights	TOP mounted OS/OW Sign or Banner
Clear Lens Strobe Lights	Red or Orange Flags

Recommended Equipment/Supplies	
EVO Handbook	First Aid Supplies
Extra OS/OW Sign or Banner	Tape Measure
Extra Flashing Amber Lights	Tool Kit
Extra radio batteries	Shovel
Extra channelization devices	Tarps & lashings
Flashlight	Rain Gear
High Visibility Hard Hat	Local/State Maps

Vehicle Maintenance	
Test Headlights	Check fuel level
Test Turn Signals/Hazards	Check oil level
Test Brake Lights	Check coolant level
Adjust rear mirror	Check windshield wiper fluid level
Adjust side mirrors	Check for leaks
Test horn	Check tire pressure

Trip Planning	
Verify permitted route	Contact municipalities if necessary
Identify locations requiring extra caution (ex: bridges, RR crossings, intersections, work zones, etc.)	

Important Phone Numbers	
NCDOT Oversize/Overweight Permit Unit	(919) 814-3700 (local) or (888) 221-8166 (toll free)
NCDPS State Highway Patrol	1 (800) 662-7956 or *HP (*47)
Norfolk Southern	1 (800) 946-4744
CSX	1 (800) 232-0144

Notes



Appendix B

CONTACT INFORMATION

NCDOT – Oversize/Overweight Permit Unit

Phone ----- (919) 814-3700
Toll Free -----1 (888) 221-8166

State Highway Patrol - Troop Offices

Troop A (Greenville) ----- (252) 758-5300
Troop B (Fayetteville) ----- (910) 486-1058
Troop C (Raleigh) ----- (919) 733-3911
Troop D (Greensboro) ----- (336) 334-5621
Troop E (Salisbury) ----- (704) 639-7595
Troop F (Newton) ----- (828) 466-5504
Troop G (Asheville) ----- (828) 298-4253
Troop H (Monroe) ----- (704) 283-8559
Troop I (Cary) ----- (919) 319-1523

Municipalities, Traffic Services

Asheville ----- (828) 259-5943
Greensboro ----- (336) 373-2489
Cary ----- (919) 462-3833
Greenville ----- (252) 329-4066
Chapel Hill ----- (919) 969-4999
High Point ----- (336) 883-3225
Charlotte ----- (704) 336-3893
Jacksonville ----- (910) 938-5220
Concord ----- (704) 920-5338
Raleigh ----- (919) 996-3030
Durham ----- (919) 560-4366
Rocky Mount ----- (252) 972-1121
Fayetteville ----- (910) 433-1660
Wilmington ----- (910) 341-7888
Gastonia ----- (704) 854-6635
Winston-Salem ----- (336) 727-2707

Railroad Emergency Numbers

Norfolk Southern1 ----- (800) 946-4744
CSX11 ----- (800) 232-0144
NC Highway Patrol ----- (919) 733-7952
NC Highway Patrol (cell phone) ----- *HP (*47)



Appendix C

SAMPLE PERMIT

North Carolina DOT Division of Highways
Oversize Overweight Permit Unit

Single Trip Permit # S2405014T00010

Valid from 5/1/2024 to 5/30/2024



Permittee

NCDOT OSOW Unit Test Customer
750 North Greenfield Parkway
Garner, NC 27529

Load Description: Beam with Dolly
Additional Description: Dolly with Jeep
Escorts: 1 - Front

Power Unit

Type: Truck-Tractor
License: ID31100 - ME
VIN: 72402
Registered Weight: 80,000
Total # Axles: 7

Overall Dimensions

Width: 13ft 0in
Length: 75ft 0in
Height: 14ft 6in

Weights (lbs)

Gross Weight: 132,000
Steer Axle: 20,000
Single Axle: 25,000
Tandem Axle: 50,000
Tridem Axle: 60,000
Four or more Axles: 68,000

Overhang

Front: None
Back: None

Route

From: I-77 S, Virginia State Line
To: I-85 S, South Carolina State Line
Via:

1. Start at **I-77 S, Virginia State Line**
2. Go south on **I-77 S**
(Pass by Virginia State Line) (85.06 mi)
3. Continue on **RAMP** to Take **Exit #19B-A** To I-485, To I-85, Pineville, Matthews
Then Take **Exit #19B** To I-485 S Outer, to **I-85 S**, Pineville (1.19 mi)
4. Continue on **I-485** (9.24 mi)
5. Continue on **RAMP** to Take **Exit #12** To Moores Chapel Road (0.28 mi)



6. Turn right on **Mecklenburg County / SR-1601 / Moores Chapel Rd** and immediately turn right on **Mecklenburg County / SR-1601 / Moores Chapel Rd** (0.61 mi)
7. Turn left on **Mecklenburg County / SR-1625 / Sam Wilson Rd** (1.07 mi)
8. Turn right on **RAMP** (0.23 mi)
9. Continue on **I-85 S**
(Pass by South Carolina State Line) (29.25 mi)
10. Finish at the **North Carolina state line**, at the **North Carolina state line**, at **I-85 S, South Carolina State Line**

126.93 mi - 1 hr 57 min

Total trip distance: 126.93 mi

General Restrictions

Issuance of a permit by the North Carolina Department of Transportation does not imply nor guarantee the clearance of width or height along the permitted route of travel. It is the responsibility of the permit holder to check route prior to travel thereon.

Vehicle must be properly registered or apportioned to operate in North Carolina prior to movement.

Permits issued by the Department of Transportation do not authorize travel on city streets, such authority must be obtained from the city/municipality prior to movement of permitted load.

Permittee to follow all detours authorized by DOT or law enforcement. Use extreme safety precautions and obey posted speed limits while traveling into or through all NCDOT authorized construction work zones.

It is the responsibility of the mover to review permitted route, locate railroad crossings and follow safety protocol. Including but not limited to contacting affected railroad company.

Vehicles with low ground clearance are to use caution when traveling over any railroad crossings permitted along route and are required to determine if there is sufficient clearance before attempting to cross the track(s).

If a vehicle is stuck on a railroad track, or if it takes longer than 15 seconds to cross the tracks, the operator is required to notify the railroad company immediately. Every railroad crossing should have the contact information and crossing number posted at the crossing.

Issuance Restrictions

The commodity being transported is to be so loaded or reduced to the least possible dimension and/or weight prior to application for an over-dimension and/or overweight permit.

Vehicle combination must be a truck tractor/semi-trailer combination.

On permitted route segments that include an interstate, freeway, or toll way requiring entering and exiting via an interchange; a distance of one mile is authorized from the route of travel provided on this permit onto another contiguous state jurisdiction highway provided that no bridges are crossed, no posted weight limits are exceeded and all other provisions of the permit are followed. The one mile distance shall be from ramp terminal at the intersection of the ramp and other state highway. In the event that the mover travels beyond the one mile limit, crosses a bridge within the one mile variance, or violates any other provision of the permit, the mover is in violation and subject to applicable fines and penalties as specified in G.S. 20-118 and 20-119. Since compliance is the responsibility of the operator, NCDOT recommends that the mover familiarize themselves with the various exits they may choose, and review NCDOT guidance on this provision which is found on the NCDOT Oversize Overweight Permit Unit's web site.

Escort vehicle(s) shall be equipped with: flashing amber light that is visible for 500 feet and 360 degrees to be mounted on top of the escort vehicle, display a banner, yellow in color, mounted on bumper or roof bearing the legend "WIDE LOAD" or "OVERSIZED LOAD" in black (10 inch X 1-1/2 inch) brush stroke lettering visible from the front or rear as required by the location of the escort.



The driver of the escort vehicle is required to be certified in accordance with the North Carolina Escort Vehicle Operator Certification Program.

Escort must be a truck (single vehicle) of not less than 1/4 ton rated load capacity but not more than 17,000 lbs. Gross Vehicle Weight Rating or a single passenger vehicle of not less than 2,000 lbs. gross weight.
Escort vehicle is not authorized to tow a trailer.

Power unit and escort vehicle must maintain radio contact and burn headlamps during movement.

Escort vehicle shall display on both sides of vehicle placards/identification signs measuring 8 inches x 12 inches providing the escort company's or individual's name and telephone number.

No driver or passenger other than a certified escort vehicle operator will be allowed to travel in the escort vehicle.

Escort vehicle/transporters shall monitor trailing traffic build up and pull to the roadside periodically as the opportunity arises to allow the line of traffic to clear.

Escort vehicle operators are prohibited from the use of electronic devices except to communicate hazard-related information to the vehicle being escorted.

Dimensions different from those stated on the permit shall not eliminate the escort requirement indicated on this document.

Permit not valid when: visibility is less than 500 feet; highway covered with ice or snow; or travel conditions are considered unsafe by the Division of Highways or law enforcement having jurisdiction.

Travel prohibited within a 10-mile radius of the city limits of Charlotte, Raleigh, Durham and Chapel Hill between 7am - 9am and 4pm - 6pm Monday through Friday.

Convoy travel is not authorized. Permitted vehicles owned or leased by the same company or permitted vehicles originating at the same location shall travel at a distance of not less than two miles apart.

Special Restrictions

Front escort required.

Red or orange flags (18 inches x 18 inches) to be displayed on each corner of the load at the widest point on loads with width exceeding 8 feet 6 inches.

Vehicle combination with extreme wheelbase less than 51 feet limits permitted gross weight to 122,000 lbs. or less.

A yellow 7 feet x 18 inches high banner with legend "Oversize Load" or "Wide Load" in black 10 inch x 1-1/2 inch brush stroke letters to be displayed on front and rear of vehicle/vehicle combination. May be two separate banners totaling a length of 7 feet to provide for display of registration plates/decals.

Front escort vehicle is required to have a height pole indicator.

Travel is authorized seven days a week sunrise to sunset. Sunrise and sunset is determined by the time published by the United States Naval Observatory according to the vehicle's current location.

Route Restrictions

The route from a specific origin to a specific destination must be included within a single permitted route of travel.



Conditions of Usage

Permittee is responsible for any/all damages to persons/property. Civil penalties will be assessed if: operating off route, transporting improper load, in violation of escort requirements, operating with improper safety equipment or license, failure to comply with dimensions and/or weights of permit, failure to comply with travel restrictions or falsification of a permit application.

By use of this permit, the permittee certifies that they are familiar with all laws/requirements governing this move and will be in full compliance during movement. Any alteration(s) will result in voiding the permit and suspension of North Carolina permit privileges. Repeated permit violations may result in suspension and/or denial of North Carolina permit privileges.



Benjamin Hinnant
Director of Permits

Authorized 5/1/2024 2:13 PM



This image shows a full page of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.



**North Carolina Department of Transportation
Mobility and Safety Division
Oversize/Overweight Permit Unit**

750 N. Greenfield Parkway
Garner, NC 27529

1-888-221-8166