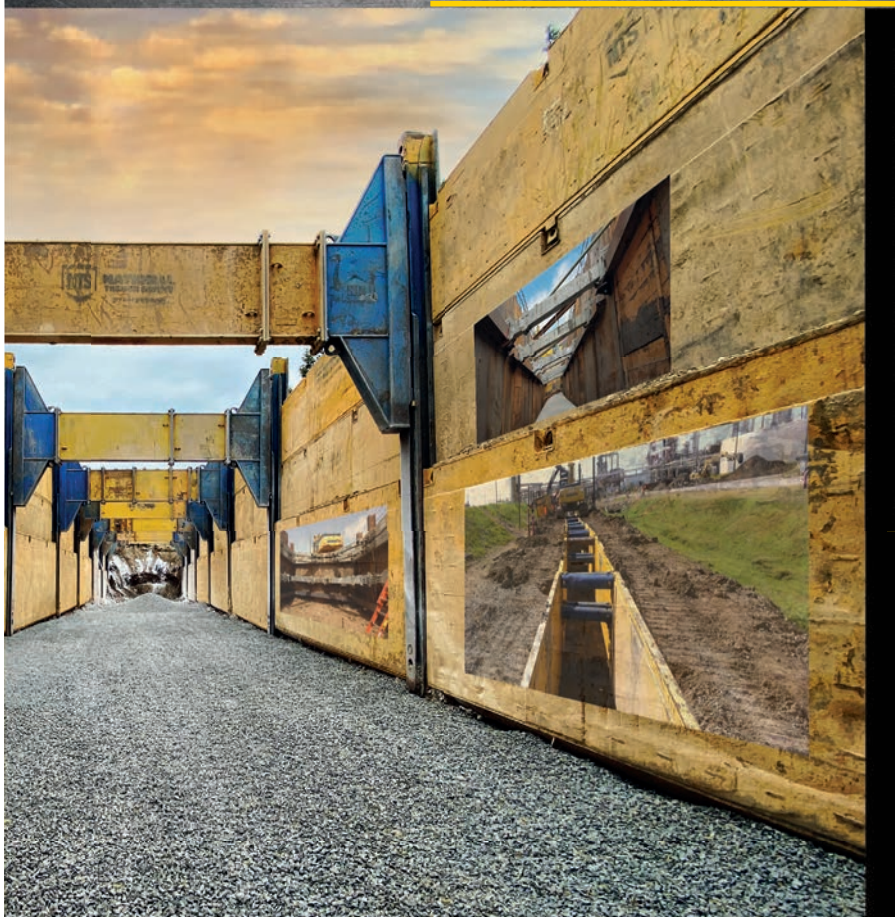




NATIONAL TRENCH SAFETY

WHERE SERVICE MEETS EXPERTISE.

PRODUCT CATALOG



About NTS

NTS is the only trench and traffic safety equipment company with a national branch network. We provide a diversified, comprehensive inventory of equipment for rental and sale, trench and traffic safety engineering services and an extensive OSHA compliant training program. At its core, NTS is a company built upon service, as evidenced by our mission statement.



NATIONAL TRENCH SAFETY

WHERE SERVICE MEETS EXPERTISE

NTS Mission Statement

We give our customers what they want, when they want it, on time, every time.

WE DEFINE SUCCESSFUL CUSTOMER SERVICE AS FOUR ACTIONABLE OBJECTIVES:

- › We will give our customers what they want, when they want it, every time.
- › We will be dedicated to exceeding customer expectations each and every time.
- › We will provide the most cost-effective solutions to our customers' business needs.
- › We will do what we say we will do.

We are NTS, and we look forward to earning your business.

Disclaimer: Information in this catalog is for illustrative purposes only. Manufacturer tabulated data should be consulted for all specifications including specific depth ratings.



Table of Contents

WELCOME >

ABOUT NTS	1
-----------	---

TRENCH SAFETY >

HYDRAULIC VERTICAL SHORES	3
HYDRAULIC WALERS	4
LITE GUARD™ ALUMINUM TRENCH SHIELDS	5
ALUMINUM TRENCH SHIELDS	6
MODULAR ALUMINUM SHIELDS	7
PIT BOXES	8
STEEL TRENCH SHIELDS	9
STEEL ARCH SPREADERS	10
STEEL & HYDRAULIC MANHOLE SYSTEMS	11
SLIDE RAIL SYSTEMS	13
SLIDE RAIL SYSTEM ACCESSORIES	15
STATIC BRACING SYSTEM	16
STEEL SHEETING FRAMES & STEEL SHEETING	17
BEAM AND PLATE SYSTEMS	19
HYDRAULIC EXCAVATION BRACES	20
TRENCH BRIDGES & TELESCOPING WALKWAYS	22
ULTRASHORE	23
TRENCH FALL PROTECTION	24
SAFETY SUPPLIES	26

TRAFFIC SAFETY >

STEEL PLATES	27
COMPOSITE GROUND MATS	28
TRAFFIC SIGNS	29
MESSAGE AND ARROW BOARDS	30
TRUCK MOUNTED ATTENUATORS	31
HIGHWAY CRASH CUSHIONS & GUARDRAIL	32
TRAFFIC CHANNELIZERS	33
TRAFFIC STRIPING PAINT	35
ACCESSORIES	36
LIGHT TOWERS	37
CONSTRUCTION LASERS	38
PIPE PLUGS & TESTING EQUIPMENT	39
HYDROSTATIC TEST PUMPS, PIPE JOINT TESTER	40
CONFINED SPACE EQUIPMENT	41
SPECIALTY EQUIPMENT	43

SERVICES >

ENGINEERING SERVICES	45
NTS MOBILE APP SAFETY TRAINING	46
SAFETY TRAINING	47
SITE SPECIFIC ENGINEERED SYSTEMS	49
BRANCH LOCATIONS	50

Hydraulic Vertical Shores

TRENCH SAFETY

HYDRAULIC VERTICAL SHORES ARE LIGHTWEIGHT SHORING DEVICES THAT ARE PRESSURIZED AGAINST A TRENCH WALL TO PROVIDE PROACTIVE SOIL SUPPORT.

- Rail heights range from 1.5' to 20' with cylinder working ranges from 17" to 180"
- High clearance vertical shores are also available to provide for greater than 4' of clearance from the bottom
- OSHA-compliant sheeting can be utilized when soil sloughing or raveling is a concern in conjunction with the vertical shores
- General requirement is that shores must be spaced 4' vertically from the next shore, 4' vertically from the next cylinder and no more than 2' from the top of the trench



Cylinder Models	Work Range
27	17" - 27"
36	22" - 36"
46	28" - 46"
55	34" - 55"
64	40" - 64"
88	52" - 88"
88/24	76" - 112"
88/42	94" - 130"
88/48	100" - 136"
88/56	108" - 144"

Hydraulic Walers

HYDRAULIC WALERS ARE A LIGHTWEIGHT SHORING SYSTEM SIMILAR TO HYDRAULIC VERTICAL SHORES, EXCEPT THAT THE SYSTEM UTILIZES HORIZONTAL RAILS TO PROVIDE PROACTIVE SOIL SUPPORT. HYDRAULIC WALERS CAN YIELD INCREASED TIME EFFICIENCIES.

- Rail lengths range from 8' to 16'
- Hydraulic struts or hydraulic horizontally shore cylinders can be used with the system
- Hydraulic struts can be utilized to provide end loading along unenclosed ends



Lite Guard™ Aluminum Trench Shields

TRENCH
SAFETY

THE LITE GUARD™ ALUMINUM SHIELD IS A REVOLUTIONARY, INTRODUCTION TO THE TRENCH SAFETY INDUSTRY. THROUGH A PROPRIETARY DESIGN, IT TAKES THE LIGHTWEIGHT BENEFITS OF ALUMINUM CONSTRUCTION AND YIELDS A HIGH STRENGTH SHIELD WITH DEPTH RATINGS TYPICALLY SEEN ONLY IN STEEL CONSTRUCTED TRENCH SHIELDS.

- Proprietary aluminum panel design with hardened, reinforced aluminum knife edge
- Standard shield heights from 4' to 8' and lengths from 8' to 24' with custom sizes available
- Utilize adjustable spreaders to provide support the width of the excavation
- Optional arch spreader kits are available



Shield Size	PSF Rating	Depth Rating			Weight (lbs)	Vertical Clearance
		B	C-60	C-80		
6" wall 8' x 12'	2,155	20	20	20	3,225	50"
6" wall 8' x 16'	1,212	20	20	16	4,075	48"
6" wall 8' x 20'	776	17	13	10	6,125	48"
6" wall 8' x 24'	700	16	12	10	7,350	50"



Disclaimer: Information above is for illustrative purposes only. Manufacturer tabulated data should be consulted for specific depth ratings.

Aluminum Trench Shields

ALUMINUM TRENCH SHIELDS PROVIDE LIGHTWEIGHT SOIL PROTECTION. ALUMINUM TRENCH SHIELDS COME IN A VARIETY OF CONFIGURATIONS INCLUDING THE NEW LITE GUARD™ ALUMINUM SHIELD, STANDARD HYDRAULIC AND STATIC ALUMINUM SHIELDS AND MODULAR ALUMINUM SHIELDS.

- Available in 4', 6' and 8' heights with lengths ranging from 6' to 12'
- Utilize adjustable static or hydraulic struts to provide necessary widths
- Optional accessories include end panel kits to provide closed ends, stacking sockets and leg kits
- Heavier smooth wall shields with higher clearance are also available



Aluminum Shield Sizes	Maximum Trench Depth			
	Static Struts		Hydraulic Struts	
	B-45	C-60	B-45	C-60
6'x6'	25'	25'	25'	25'
8'x8'	25'	25'	25'	25'
8'x10'	25'	19'	25'	21'
8'x12'	16'	12'	23'	17'

Disclaimer: Information above is for illustrative purposes only. Manufacturer tabulated data should be consulted for specific depth ratings.

TO ORDER CALL 888-234-9244 www.ntsafety.com

Modular Aluminum Trench Shields

TRENCH
SAFETY

MODULAR ALUMINUM TRENCH SHIELDS ARE A LIGHTWEIGHT, MODULAR SYSTEM THAT CAN PROVIDE STATIC OR PROACTIVE SOIL SUPPORT. THE SYSTEM IS DESIGNED FOR EASE OF USE AND CAN EVEN BE TRANSPORTED AS COMPONENTS IN THE BACK OF A PICKUP TRUCK.



Panel Sizes	Adjustable Spreader Sizes
2'x3'	
2'x4'	
2'x5'	27" - 36"
2'x6'	35" - 48"
2'x7'	40" - 60"
2'x8'	52" - 84"
2'x10'	60" - 96"
2'x12'	
2'x14'	
2'x16'	

- The system is composed of rails and panels with the panels inserted into the rails and pinned into place to form the protective system
- Available in panel sizes ranging from 3' to 16' with rails from 4' to 12' heights
- Optional accessories include adjustable spreaders, fixed length spreaders, screw jacks and high clearance arch spreaders

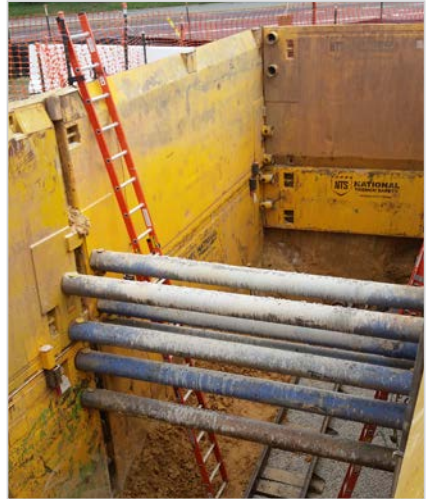


Disclaimer: Information above is for illustrative purposes only. Manufacturer tabulated data should be consulted for specific depth ratings.

Pit Boxes

STEEL PIT BOXES ARE A COST EFFECTIVE ALTERNATIVE WHEN A CONTRACTOR NEEDS TO ADDRESS THE SHORING OR SHIELDING OF AN OPEN END OF A TRENCH SHIELD OR WHEN A FOUR-SIDED SYSTEM IS NEEDED.

- Steel pit boxes are an extension of steel trench shields and use a steel panel to close the end of the trench. The panels are pinned together to form a solid integrated system
- Three and four sided pit box configurations are available
- Pit boxes are available in a range of sizes from 4' to 10' tall and 8' to 32' lengths
- Pit boxes can be tied into other shoring or shielding systems to provide comprehensive shoring solutions
- A variety of pit box styles are available to meet specific application needs as well as regional preferences



Steel Trench Shields

TRENCH SAFETY

CONVENTIONAL STEEL TRENCH SHIELDS ARE A RUGGED PROTECTIVE SYSTEM DESIGNED TO PROTECT WORKERS SHOULD A CAVE-IN OCCUR.

- NTS maintains one of the nation's largest rental fleets of steel trench shields
- All NTS steel trench shields are built to NTS's stringent specifications to withstand the most demanding applications and maximize the strength-to-weight relationship
- Rental fleet inventory typically ranges from 4' to 10' tall trench shields and 8' to 32' lengths, with specialty customized trench shields also available
- Lightweight trench shields and single wall trench shields are also available, in addition to conventional double wall trench shields
- Standard NTS features include four-point lifting systems, reinforced through wall collar design and heavy-duty stacking sockets



Size	Capacity	Weight	A	B	C-60	C
DW40412	3,300	3,494	40	30	30	20
DW40416	1,720	4,364	40	30	30	20
DW40420	1,050	5,291	40	27	20	15
DW40424	710	6,162	32	18	13	10
DW40810	1,683	5,087	40	30	30	20
DW40812	1,400	5,850	40	30	27	20
DW40816	1,310	8,038	40	30	26	19
DW40820	1,050	9,786	40	27	20	15
DW40824	700	11,287	31	17	13	10
DW60820	1,450	11,250	40	30	29	22
DW60824	1,013	12,954	40	26	20	15
DW61020	900	12,994	40	23	17	13
DW61024	887	15,496	40	23	17	13

Disclaimer: Information above is for illustrative purposes only.
 Manufacturer tabulated data should be consulted for specific depth ratings.

TRENCH SAFETY

Steel Arch Spreaders

- Steel arch spreaders are a common accessory for steel trench shields and provide improved vertical clearance when compared to conventional steel spreaders
- A typical 6" double wall, 8' tall trench shield may have 65" of vertical pipe clearance when utilizing conventional steel spreaders. By switching to steel arch spreaders, the vertical pipe clearance can be improved to 96"
- Steel arch spreaders start at 6' widths and can be increased utilizing arch spreader extensions in conjunction with manufacturer's tabulated data
- When used in an inverted configuration, steel arch spreaders can also provide for additional excavator reach



Steel Manhole Shields

TRENCH SAFETY

STEEL MANHOLE SHIELDS PROVIDE STRONG PROTECTIVE SYSTEM SUPPORT WHEN PERFORMING MANHOLE INSTALLATIONS, POINT REPAIRS AND SIMILAR PROJECTS.

› Conventional Square Manhole Shields

- Single and double wall models available
- Available in standard 8', 10' and 12' widths and in 4' and 8' heights



› Lightweight Round Manhole Shields

- Lightweight construction design
- Available in 8.5' and 10' diameters
- Adjustable legs and side cut-outs are available



› Tap Boxes

- Complete four-sided protection
- Single and double wall models available
- Available in standard 8', 10' and 12' widths and in 4', 6' and 8' heights
- Adjustable legs and cut-outs are available



Hydraulic Manhole Systems

HYDRAULIC MANHOLE SHIELDS AND BRACES BUILT UPON THE CONCEPT OF STEEL MANHOLE SHIELDS, ADDING A HYDRAULIC ELEMENT THAT CAN PROVIDE PROACTIVE SOIL SUPPORT DURING THE EXCAVATION PROCESS.

› Hydraulic Manhole Shields

- Consists of a hydraulic manhole frame attached to OSHA-compliant sheeting
- Available in 4', 6' and 8' heights
- Can act as a static or proactive support system
- Stackable for depths up to 20'



› Hydraulic Manhole Braces

- Hydraulic cylinders with steel oversleeves that provide four sided soil support for an excavation
- Typically used with finn form, steel sheeting, steel plates or other OSHA-compliant sheeting
- Available with 2" and 3" cylinder configurations depending on project requirements



Slide Rail Systems

TRENCH SAFETY

SLIDE RAIL SYSTEMS PROVIDE A SOLID, STRUCTURAL STEEL PROTECTIVE SYSTEM FOR PIT AND LINEAR PRODUCTION APPLICATIONS.

- Triple, double and single slide rail systems are available to accommodate varying depths
- “Dig and push” system that can provide continuous soil support
- Modular component design allows a high degree of customization to meet project-specific requirements
- Performs well in poor soil conditions while providing an efficient installation and removal process



› Large Hydraulic Brace Supported Slide Rail

- Features a pit slide rail system with internal hydraulic bracing to provide additional internal support for large free span projects
- Eliminates the need for tiebacks and sacrificial members on many projects
- Can be used in excavations up to 80'x80' to achieve clear span excavation



› Hydralifter Panel Puller

- Optional Hydralifter allows for an efficient way of removing slide rail panels
- Helps to prevent damage to panels during removal
- Ideal for panels that are “stuck” due to soil conditions



Slide Rail Systems

SLIDE RAIL SYSTEMS PROVIDE A SOLID, STRUCTURAL STEEL PROTECTIVE SYSTEM FOR PIT AND LINEAR PRODUCTION APPLICATIONS.



Slide Rail System Accessories

TRENCH
SAFETY

ONE OF THE UNIQUE FEATURES OF THE SBH SLIDE RAIL SYSTEM IS ITS VERSATILITY. THERE ARE SEVERAL OPTIONAL ACCESSORIES THAT GREATLY EXTEND THE SYSTEM'S CAPABILITIES.

› Rolling Struts

- In linear applications, strut carts are installed along linear rails to provide horizontal support
- Strut carts can be moved up and down according to a site-specific plan and pinned in place
- Allows for increased vertical clearance while providing support during the excavation process



› Steel Sheeting Guides

- Steel sheeting guides are used in place of slide rail panels and pushed along the channels in the rails
- Once installed, steel sheets are then inserted along grooves in the guides and pushed down
- Steel sheeting guides can help accommodate crossing utilities while leveraging the slide rail system's efficiencies



› Tie Backs

- Tie backs provide an open span excavation
- The slide rail system is typically installed to grade with linear rolling struts. Once installed, beams are then inserted along the system's perimeter and anchored to the system. Once the beams have been anchored, the rolling strut can be moved to provide an open span excavation in conjunction with a site-specific plan



Static Bracing System

THE “YANK A TANK” STATIC BRACING SYSTEM IS THE ANSWER TO CONTRACTOR’S SEEKING AN ECONOMICAL PROTECTIVE SYSTEM FOR SHALLOW, FREE SPAN EXCAVATIONS LIKE THOSE TYPICALLY ASSOCIATED WITH FUEL TANK REMOVAL AND REPLACEMENT PROJECTS. NTS’S “YANK A TANK” STATIC BRACING SYSTEM WAS DESIGNED USING HIGH STRENGTH WALERS THAT CAN BE BOLTED TOGETHER AND USED IN CONJUNCTION WITH A CONTRACTOR’S PREFERRED METHOD OF SHEETING.

- Engineered static bracing system designed for shallow, free span excavations
- Modular design allows for the bracing footprint to be adjusted to the minimum required by a project, reducing excavation costs as well as limiting the amount of bedding and backfill material required to control project costs
- Can be used with a contractor’s own sheeting or with NTS provided sheeting
- Cost effective, economical protective system for competitive tank removal and installation projects



Steel Sheet Pile Frames

TRENCH SAFETY

STEEL SHEETING FRAMES CAN BE USED TO PROVIDE POSITIVE SOIL SUPPORT IN THE WORST SOIL CONDITIONS. RUGGED STEEL GUIDES ARE USED TO FORM THE EDGE OF THE PROTECTIVE SYSTEM. STEEL SHEETS ARE INSERTED THROUGH THE GUIDES TO PROVIDE SOIL SUPPORT TO THE DEPTH OF THE EXCAVATION.

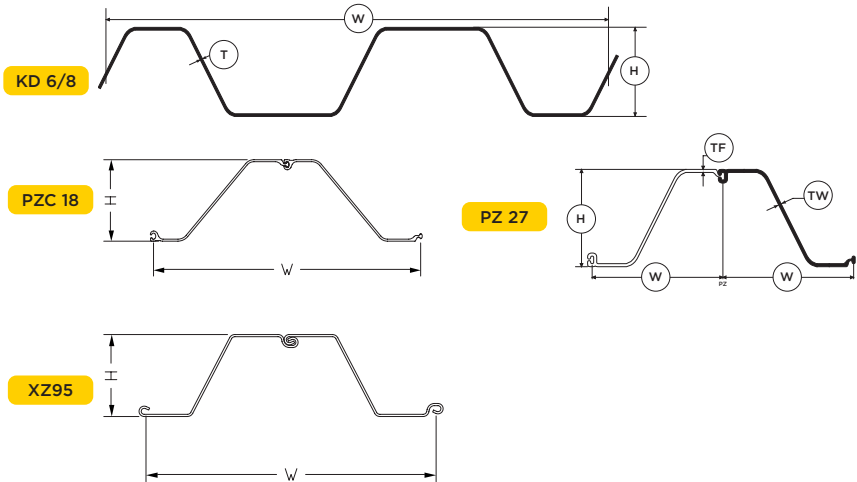
- The system can be used in pit applications with the sheeting frame and corner rails, and in some cases in linear applications with conventional steel spreaders (depending upon the system's design)
- The system provides a “dig and push” installation method as opposed to the vibration typically required to install steel sheeting
- The system helps to minimize soil disturbance around the excavation
- Sheet piling frames can be used to provide open span excavations from 10'x10' to 40'x40'



Steel Sheeting

NATIONAL TRENCH SAFETY PROVIDES A WIDE VARIETY OF COLD AND HOT ROLLED STEEL SHEETING TO MEET THE UNIQUE NEEDS OF EACH PROJECT.

- Interlocking and overlapping sheets available
- Multiple sheeting profiles
- Common length sheets to accommodate job-specific needs
- Corner sheets available for select profiles
- Can be used in conjunction with hydraulic excavation braces and other systems



Model	Width W	Thickness T	Height H	Weight (lbs/ft)	Weight (lbs/sq ft)	Section Modulus (in ³ /ft)
KD 6/8	23.6"	.31"	3.15"	33.6	17	8.9
PZ 27	18"	.375"	12"	40.5	27	30.2
PZC 18	25"	.375"	15.25"	50.4	24.2	33.5
XZ95	25"	.375"	14.12"	51.7	24.8	33.5

Beam and Plate Systems

TRENCH SAFETY

BEAM AND PLATE SYSTEMS OFFER LARGE FREE SPAN WORK AREAS AND A COST-EFFECTIVE SYSTEM FOR EXTENDED DURATION PROJECTS.

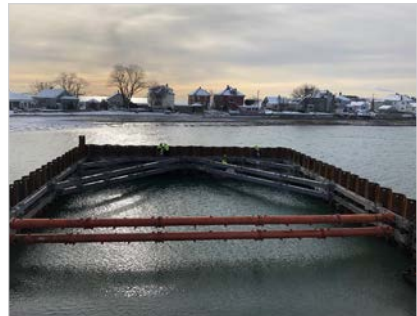
- Pilot holes are drilled for the beams, and beams are then inserted through those holes
- Steel plates are then inserted between the beam's flanges to provide soil support
- Can be installed in a “dig and push” method or can be vibrated into place prior to excavation
- Can be used for one, two, three or four-sided excavations



Hydraulic Excavation Braces

HYDRAULIC EXCAVATION BRACES PROVIDE AN ENHANCEMENT TO TYPICAL TIGHT SHEETING FOR LARGER EXCAVATIONS.

- Hydraulic rings can be built in many polygons using attached arms
- Hydraulic arm features a mechanical and hydraulic ram
- Hydraulic ram is pinned in place during the excavation, but can be collapsed or extended to account for minor site deviations
- Can be used with steel sheeting, beam and plate and slide rail systems to provide necessary structural support
- Can handle the largest excavations



Hydraulic Excavation Braces

TRENCH
SAFETY



Trench Bridges & Telescoping Walkways

AS SAFETY HAS BECOME INCREASINGLY PARAMOUNT ON PROJECTS, NEW METHODS HAVE EMERGED FOR CONTRACTORS TO FACILITATE SAFE TRAVEL ACROSS TRENCHES. NTS CARRIES A WIDE VARIETY OF TRENCH BRIDGES AND TELESCOPING WALKWAYS TO MEET VARYING CONTRACTOR NEEDS.

› Trench Bridges

- OSHA Compliant Design
- Heavy duty, wide trench bridges designed for wide trench spans designed to provide a safe means of traveling across a trench
- Aluminum construction with unique design elements to balance strength and weight
- Several standard sizes available to meet conventional needs
- Custom designed and engineered are available for specific product applications



Size	Weight	Load Rating
10'-13'	594 lbs	50 lbs per ft ²
14'-17'	634 lbs	50 lbs per ft ²
18'-20'	673 lbs	50 lbs per ft ²

› Telescoping Walkways

- OSHA Compliant Design
- Designed to provide a safe, effective access and egress route for workers to reach a protective system
- Features telescoping walkway platforms that allows the system to be sized to the size needed for the trench without cumbersome, excessive lengths for machinery and workers to work around, as well as changing trench widths
- Aluminum construction with unique design elements to balance strength and weight
- Several standard sizes available to meet conventional needs, with custom designed and engineer systems available for specific applications



Size	Weight	Load Rating
4'-6'	104 lbs	50 lbs per ft ²
8'-11'	216 lbs	50 lbs per ft ²

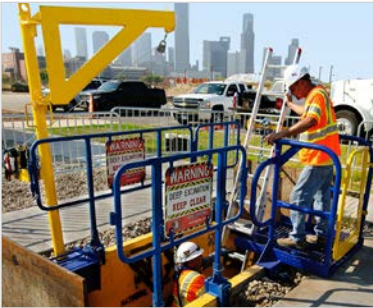
NTS IS THE EXCLUSIVE MANUFACTURER OF THE FAMOUS ULTRASHORE LIGHTWEIGHT TRENCH SHIELD. ASSEMBLED IN MINUTES AND CARRIED BY HAND, THE ULTRASHORE LIGHTWEIGHT TRENCH SHIELD IS IDEAL FOR DIFFICULT TO REACH JOBSITES, TIGHT SPACES AND JOBS WHERE LARGER BOXES ARE NOT PRACTICAL. A FAVORITE OF SEWER, WATER AND PLUMBING CONTRACTORS ACROSS THE UNITED STATES

- Gives protection in trenches up to 12 ft deep including class "C" soils.
- fA pair of assembled panels can be lowered into an excavation by a single person.
- fA stacked assembly of two panels can be lowered into an excavation by two people.
- fIt is made of a specially corrugated aluminum that weighs hundreds of pounds less than other shoring products.
- fAssembles in minutes.
- All panels are stackable and can be used horizontally or vertically.
- fClose off one or both ends with quick-release, spring-loaded end closure panels.
- fWheel kits and legs make it possible to take full advantage of O.S.H.A. regulations.



THE NTS WORK ZONE SAFETY SYSTEM IS AN INTEGRATED FALL PROTECTION SYSTEM DESIGNED FOR THE TRENCH SAFETY INDUSTRY. THE SYSTEM COMBINES PATENTED HANDRAIL, DAVIT ARM AND LADDER ACCESS PLATFORM COMPONENTS TO FORM A COMPREHENSIVE FALL PROTECTION SOLUTION FOR CONTRACTORS.

Work Zone Safety System



› NTS Fall Protection System

- Single system for access, egress, recovery and fall protection tie off
- Articulating davit arm allows for a greater range of motion without moving the system
- Offset design allows for use with continuous handrail system installed
- Can be easily relocated to any point along the excavation
- Patented



› NTS Handrail System

- Variable handrail lengths of 2', 3', 4', 6' and 8'
- Modular components allow for easy installation from the outside of the trench
- Handrails pin together to create a continuous barrier
- Patented



› NTS Ladder Access System

- Provides safe work zone and ladder access for workers entering/exiting an excavation
- Platform and ladder rest can be configured for virtually any size excavation
- Designed to be integrated with the NTS Handrail System to provide complete work zone handrail and access system
- Patented

Aluminum Handrail System

- Lightweight handrail system specifically designed for aluminum shield installation
- Provides access and egress gate for a continuous barrier around the excavation

Gate Opening	24"
Railing	2' to 3'
	3' to 5'
	5' to 8'
	6' to 10'
	8' to 12'

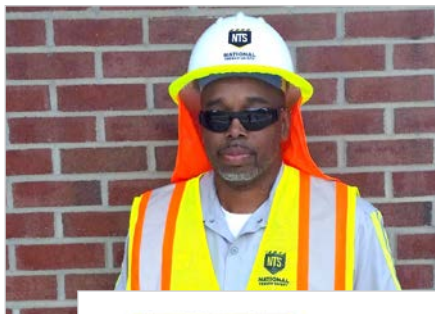


Disclaimer: Information above is for illustrative purposes only. Manufacturer tabulated data should be consulted for specific depth ratings.

Safety Supplies

NTS OFFERS A COMPREHENSIVE INVENTORY OF COMMONLY USED CONTRACTOR SUPPLIES. TO MINIMIZE TIME SPENT LOOKING FOR SUPPLIES, NTS STOCKS THE FOLLOWING ITEMS:

- Hard hats
- Neck shades
- Caution and flagging tape
- Warning flags
- Stop and slow paddles
- Pavement and chip seal markers
- Temporary paving tapes
- Marking paint
- Ear plugs
- Safety glasses
- All types of vests and safety apparel



Steel Plates

TRAFFIC SAFETY

NTS STEEL ROAD CROSSING PLATES FEATURE HARDENED WELD NUTS AND ENGINEERED LIFTING DEVICES WITH AN INDUSTRY STANDARD MINIMUM SAFETY FACTOR OF 5-TO-1 TO PROVIDE SAFE, EASY LIFTING OF THE PLATE FROM EITHER SIDE.

- NTS plates may be stacked flat requiring no dunnage
- NTS plates are a minimum ASTM A-36 grade steel
- Various standard sizes of steel plates ranging from 4' to 20'
- Skid-resistant texture is applied for enhanced vehicle safety
- NTS operates a large and late model boom truck fleet for quick and safe delivery and pickup of road plates on jobsites
- NTS also provides unique curb plate to help ease machinery transition from the road to the jobsite
- Steel plate available in 1" and 1.5" thickness



Steel Plate Sizes	Weights
1"x4'x8'	1,308 lbs
1"x5'x8'	2,042 lbs
1"x6'x10'	2,545 lbs
1"x8'x8'	2,615 lbs
1"x8'x10'	3,267 lbs
1.5"x8'x12'	3,921 lbs
1"x8'x16'	5,229 lbs
1"x8'x20'	6,536 lbs
1.5" x8'x15'	7,353 lbs
1.5"x8'x20'	9,804 lbs



Disclaimer: Information above is for illustrative purposes only. Manufacturer tabulated data should be consulted for specific depth ratings.

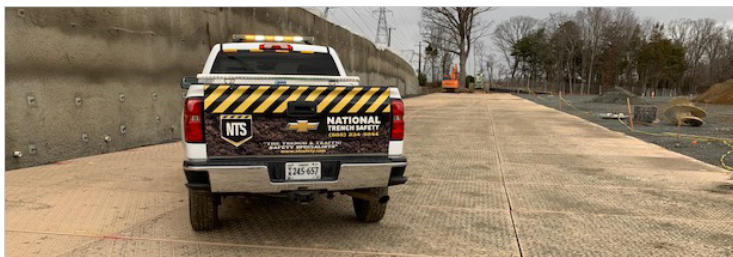
Composite Ground Mats

COMPOSITE GROUND MATS CAN BE USED DURING TEMPORARY CONSTRUCTION, AS A MEANS OF SITE ACCESS WHILE PREVENTING SITE DISTURBANCE, AND TO INCREASE STABILITY AND TRACTION ALONG AREAS OF A JOBSITE. NTS CARRIES A VARIETY OF COMPOSITE GROUND MATS TO MEET THE VARYING NEEDS OF CONTRACTORS.

- Unique tread pattern designs to improve traction for vehicles and heavy equipment
- Environmentally friendly product with low carbon footprints
- Mats are non-conductive and ideal for use on transmission projects
- DURA-BASE mats feature an overlapping lip, which helps to bind the mats together and creates a continuous work surface
- Lightweight design reduces equipment costs required for handling and installation of mats
- Mats are chemical and oil resistant



Mat Type	Material	Dimensions	Weight	Capacity
LibertyMat	High Density Polyethylene (HPDE)	7'-11" x 3'-11" x 0.5"	77 lbs	Up to 80 Tons
TuffTrak XL	High Molecular Weight Polyethylene (NMWPE)	13'-6" x 6'-8" x 1.85"	794 lbs	Up to 150 Tons
DURA-BASE	Custom HDPE	8' x 14' x 4"	1000 lbs	



NTS RENTS AND SELLS A COMPLETE LINE OF FHWA APPROVED ROAD AND HIGHWAY SIGNS, AS WELL AS PARKING AREA CONSTRUCTION SIGNS, PORTABLE SIGN STANDS, PERMANENT SIGN INSTALLATION POSTS, STAND ACCESSORIES AND ANCILLARY PRODUCTS.

› Traffic signs & stands

- Signs and stands meet the NCHRP-350 standard
- Signs come in industry standard sizes on various substrates, such as aluminum, MDO plywood, coroplast, reflective vinyl and fluorescent mesh rollup signs
- Sign sheeting material options include diamond grade, hi-intensity and engineer grade

› Sign shop services

- Many NTS locations feature a full-service sign department that can make any standard or custom sign to your specification
- NTS sign shops provide quick turnaround and professional touches, such as stenciling customer logos on cones and barricades where needed



Message and Arrow Boards

PORTABLE SOLAR-POWERED MESSAGE BOARDS ARE USED IN A VARIETY OF TRAFFIC CONTROL, EMERGENCY COMMUNICATION AND SPECIAL EVENT APPLICATIONS.

- NTS offers one of the nation's largest rental and sales fleets, featuring full matrix to mini-3 line message boards
- NTS features a diverse fleet of solar-powered arrow boards, including both 15 and 25 light trailer mounted units
- NTS also sells portable skid-mounted and vehicle-mounted traffic arrow boards
- NTS provides comprehensive in-house repairs, maintenance and upgrade services for message and arrow boards



Truck Mounted Attenuators

TRAFFIC
SAFETY

NTS MAINTAINS ONE OF THE NATION'S LARGEST RENTAL FLEETS OF TRUCK MOUNTED ATTENUATOR UNITS.

- All units have passed the NCHRP-350 report for TL-3 evaluation criteria for speeds up to 62.5 MPH
- NTS features Scorpion TMA units
- Specialized service department for the installation of these units
- TMA features strut and cartridge section linked by a support frame
- Curved side rails along the TMA are designed to redirect errant vehicles from impact with the rear of the truck
- Curved side rails are made from corrosion resistant aluminum
- Aluminum boxes are filled with a moisture resistant, aluminum honeycomb material
- NCHRP 350, Test Level 2 and 3 approved



Highway Crash Cushions & Guardrail

› Compressor

- FHWA recognized as a self-restoring, low maintenance attenuator designed to take repeated impacts with minimal or no repairs
- Specially formulated HDPE plastic injection molded attenuator modules designed to efficiently absorb energy in a short distance
- Telescoping, ultra high strength steel side panels re-direct side impacts
- Shortest TL-3 self-restoring attenuator available at 21'-6"
- System is designed for ease of installation
 - » Delivered assembled and ready to install
 - » Securement to road requires only 30 bolts
- NCHRP 350, Test Level 2 and 3 approved



› Sentry Longitudinal Energy Dissipater (SLED)

- FHWA accepted for shielding the blunt end of concrete, steel and water filled barriers, as well as FHWA accepted for use in uni and bi-directional applications
- Cost effective end treatment for concrete, steel and water filled barriers
- Stout design of the SLED virtually eliminates vaulting
- Internal steel cables help guide vehicle after an impact, creating a truly "limited gating" system
- Quick, easy set-up with no foundation anchoring
- NCHRP 350, Test Level 1, 2 and 3 Construction Zone approved



› Crash Cushion Barrels

- NCHRP 350 tested and accepted
- Optional lifting ring allows barrels can be easily lifted, emptied and moved
- Barrels are designed in weights of 200, 400, 700, 1400 and 2100 lbs
- Barrels designed for easy sand fill to a molded in-fill line to obtain the correct weight
- Reinforced lip prevents barrels from deforming when filled



Traffic Channelizers

TRAFFIC SAFETY

NTS RENTS AND SELLS A VARIETY OF CHANNELIZERS, DELINEATORS, CONES, AND BARRIERS TO PROTECT PEOPLE FROM TRAFFIC EXPOSURE.

› Water Filled Barriers

- Meet FHWA and NCHRP-350 standards
- Standard duty and heavy duty units available
- Optional fence panels are available to install above the water filled barriers
- Models with wire cables are available that can be used in place of concrete barriers in certain applications



› Barricades

- Meet FHWA and NCHRP-350 standards
- Available in stock colors of white and orange; custom colors are available for order
- Standard 32" and 42" height options
- Type I, II and III units available



› Barrels

- Engineered or hi-intensity sheeting for barrels
- Tire ring, solid rubber or sand-filled bases available
- Various manufacturers available



Traffic Channelizers

› Delineators

- Multiple lock base options
- Three distinct styles available from manufacturers, such as Safe Hit, Traffix, and Impact Recovery



› Cones

- 28", 36" and 42" reflective and non-reflective cones
- 7 lb and 10 lb varieties
- Full or slim line



› Rumble Strips

- Safety device that alerts drivers to the entry of a work zone
- Available in various lengths to be adhered to new or existing pavement



Traffic Striping Paint

TRAFFIC
SAFETY

- › **Solvent-borne traffic and parking lot paints are co-polymer based formulated for use on highways, parking lots, crosswalks, stop bars and legends.**

FEATURED PAINTS INCLUDE:

- 2170 and 2180 Series Fast-Dry Low VOC in white, yellow, black, red and blue
- 2200 series High VOC Semi-Gloss in white, yellow and red
- UT series Fast-Dry HI VOC Flat in white, yellow, black, red and blue
- Chlorinated rubber traffic and parking lot paint in white, yellow, black, red and blue



- › **Water-borne traffic paint is a full line of environmentally friendly and durable traffic striping based on proven acrylic emulsion technologies.**

FEATURED PAINTS INCLUDE:

- 1140 Series Standard-Dry in white and yellow
- 1180 Series Pro Plus Fast-Dry Lead Free in white, yellow, red, blue and green
- 1190 Series Pro Plus Semi-Gloss Lead-Free



› Graco spray tips



› Thermo primer

› Thermoplastic

- Designed to appropriate federal, state and or municipal specifications where required
- Available in white and yellow

› Epoxy

- Available in 300 ml and 600 ml
- Available in tubes and gallons

› Plastic stencils

- Letter kits
- Numbering kits
- Handicap symbols
- Left and right turns
- Arrows
- Reserved parking
- No parking
- Fire lane

› Glass beads

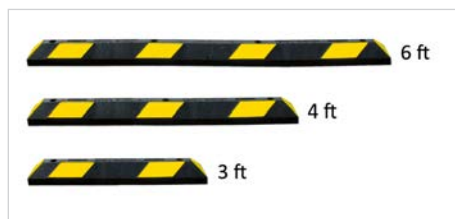
- Designed to appropriate federal, state and or municipal specifications. Available in Type I, II and III



› Perma patch

› Speed bumps and car stops

- Concrete car stops and pins
- Recycled green product speed bumps and car stops
- Available in multi-color reflectorized



› Signs

› Inverted marking paint

› Flint hot tape

› Bituminous marker adhesive

› Butal pads

› Raised pavement markers and buttons

› Square Sign Posts

- Pre-punched 12 or 14 gauge
- U-channel 12 or 14 gauge
- Sleeves, anchors and rivets

Light Towers

TRAFFIC
SAFETY

PORTABLE LIGHT TOWERS HELP ENSURE CREWS HAVE SATISFACTORY LIGHT CONDITIONS AT ALL HOURS. NTS PROVIDES COMPACT, HEAVY-DUTY LIGHT TOWERS WITH EXCEPTIONAL LIGHTING CAPABILITIES.

› Solar Assist Power Light Towers

- Eco-friendly lighting with solar charged battery power
- Energy-efficient LED bright lights
- Silent operation and no refueling
- Sealed AGM batteries and secure battery box
- 4-8 LED 4600 lumen lights on 20' mast
- Easy to use



› Engine Power Light Towers



Construction Lasers

CONSTRUCTION LASERS SPAN A WIDE VARIETY OF APPLICATIONS IN THE CONSTRUCTION FROM ASSURING THE PROPER GRADE OF PIPE DURING A UTILITY LINE INSTALLATION TO ACHIEVING A DESIRED SLOPE OR ELEVATION TO VARIOUS OTHER FUNCTIONS WHERE A PRECISE ELECTRONIC READING IS NEEDED.

› Leica Piper 100/200

- Compact and powerful, the only laser that fits inside a 4" pipe
- Automatic grade compensation
- Large clear display



› Leica Rugby 320 SG & 410/420 AG

- Designed for high accuracy for level, single or dual grades, as well as high accuracy over a long-distance range
- Waterproof and dustproof design for all weather and jobsite conditions
- Compatible with the widest range of machine control solutions



› Spectra DG613/ DG813

- 40% to -15% grade range
- Temperature compensation
- Line alert
- Waterproof design
- 60 hours of battery life
- 5 year manufacturer's warranty



› Laser Shop

- Normal repair turnaround times typically one week or less
- Large stock of common replacement parts for the most popular laser brands
- Can provide on-site training for laser set-up, maintenance and standards operations



Pipe Plugs & Testing Equipment

TRAFFIC
SAFETY

NTS RENTS AND SELLS A COMPREHENSIVE LINE-UP OF HIGH QUALITY, DURABLE PIPE PLUGS, PIPE TESTING EQUIPMENT AND DEFLECTION GAUGES.

› Pipe Plugs

- Highly durable pipe plugs for leak detection, minimal flow-through, high volume bypass work, line air test, continuous flow-through, mechanical and general plumbing
- Rental fleet sizes range from 2" to 96"
- Custom-built units also available



› Pipe Testing Equipment

- Low and high flow air test control panels with 25', 50' and 500' triple test hoses
- Large inventory of line acceptance kits, manhole cable guides and line pull cable hand winches



› Deflection Gauges

- Used to test sewer pipe for "out of roundness" or deflection
- Help to ensure flexible pipe has been properly bedded and backfilled
- Available in single and multi-size units from 4" through 24"
- Available for SDR 35 or SDR 26 pipe thickness



Hydrostatic Test Pumps, Pipe Joint Tester

› Hydrostatic Test Pump

- Designed to pressure test water lines and sewer force mains as prescribed by AWWA Standard C605, Installation of PVC Pressure Pipe and C600 Installation of Ductile-Iron Water Mains
- Twin diaphragm, four diaphragm and piston pumps are available
- Twin diaphragm pumps are used for standard water volume testing
- Four diaphragm pumps are used for high pressure and high water volume testing



› Pipe Joint Tester

- Used for fast, safe five-second tests to determine joint integrity
- Designed to test large diameter reinforced concrete pipe up to 120"
- Can be tested with water or air before backfilling operation begins
- Available in low and high pressure models



› Manhole Vacuum Test Pump

- Provides an efficient, accurate and cost-effective method for testing manholes per ASTM C1244
- Identifies infiltration and exfiltration problems by creating a vacuum and monitoring for vacuum loss
- Process is faster and less expensive than water testing
- Bladder and plate-style testers are available



Confined Space Equipment

TRAFFIC
SAFETY

NTS CARRIES A BROAD SELECTION OF CONFINED SPACE EQUIPMENT FOR RENTAL AND SALE, INCLUDING PORTABLE GAS DETECTORS, RETRIEVAL SYSTEMS AND VENTILATORS.

› Gas Monitors

- OSHA-compliant 4-gas monitors for detecting oxygen, carbon monoxide, hydrogen sulfide and combustible gases
- Monitors are tested and calibrated before each delivery
- Accessories, such as motorized pumps and sampling hoses, are readily available
- Special monitors for gases such as chlorine are available for sale



› Fall Arrest Retrieval Systems

- Two-way and three-way fall arrest systems are available
- Customizable options to meet project specific needs



Confined Space Equipment

› Gas Powered Ventilators

- Engine options include Honda and Briggs & Stratton
- Some units have the flexibility to be used for line stringing and smoke testing
- Large stocking inventories



› Electric Ventilators

- 110/220 volt and 12 volt electric motors
- Wide variety available designed for various uses



› Diesel Powered Pipeline Blower

- High-capacity pipeline blowers
- Ratings of 12,000 CFM
- Designed for use with 20" diameter ducts and 100' lengths



Specialty Equipment

SPECIALTY EQUIPMENT

› Lifting Products

- Barrier lifts with elastomeric grips
- Pipe tongs and lifts
- Rigging, slings and chains



› JB Pipe Puller

- Solid pull J-Link system eliminates chains and cables
- Self-setting and hydraulic release strut
- Standard unit can pull pipe up to 10-ft diameter
- Heavy duty unit can pull pipe up to 14-ft diameter



► Piercing Tools

- Commonly used for trenchless installation of water lines, utility piping, sewer lateral lines, utilities and other lines
- Rental and sale fleet includes tools ranging from 1.75" to 7"
- Standard rental package includes the boring tool, air tool lubricator and a 50' air hose
- Powered by standard trailer mounted air compressor that can produce 110 PSI



► Bedding Boxes

- Eliminate waste of bedding material
- Helps to ease movement of bedding material on project as needed



► Tire Cleaning Grids

- Prevents mud and debris from being carried onto the roadways
- Open grate style units easily pin together
- Ramps are also available



SERVICES

➤ Trench Safety Engineering

-



**NATIONAL
TRENCH SAFETY**

"THE TRENCH & TRAFFIC SAFETY SPECIALISTS"

STAY MOBILE

with the NTS Mobile App

SAFETY IS IN YOUR HANDS

- Complete, print, text, email and manage required OSHA daily excavation checklists
- Lookup, print, text and email manufacturer's tabulated data online
- Quick product reference tables with weights, depths and technical data
- OSHA sloping and benching charts
- Digital OSHA Excavation, Confined Space and Fall Protection Standards
- View Branch Locations, Installation Videos, Product Pictures, Open Training Classes and More



FOR MORE INFORMATION CALL (888) 234-9244
WITH A NATIONWIDE BRANCH NETWORK, WE'RE WHERE YOU NEED US TO BE

WWW.NTSAFETY.COM

NTS OFFERS A COMPREHENSIVE OSHA-COMPLIANT TRAINING PROGRAM TO KEEP CREWS WORKING SAFELY AND EFFICIENTLY.

Available Training Courses

› **Competent Person Training for Excavation Safety**

ENGLISH AND SPANISH

› **Competent Person Training for Excavation Safety - Train the Trainer**

2-DAY CLASS

› **Competent Person Training for Grave Excavation Safety**

› **Confined Space**

6-HOUR CLASS • ENGLISH AND SPANISH

Can be taught to either the 1926.1200 Construction Confined Space Standard or the 1910.146 General Industry Standard

› **Confined Space Train the Trainer**

2-DAY CLASS

Can be taught to either the 1926.1200 Construction Confined Space Standard or the 1910.146 General Industry Standard

OSHA 10-Hour Construction

2-DAY CLASS • ENGLISH AND SPANISH

OSHA 10-Hour General Industry

› 2-DAY CLASS • ENGLISH AND SPANISH

OSHA-10 Hour Construction combined with Excavation Safety Competent Person

› 2-DAY CLASS • ENGLISH AND SPANISH

OSHA 30-Hour for Construction or for General Industry

› 4-DAY CLASS

Certified Flagger Training for Texas

› 4-HOUR CLASS • ENGLISH AND SPANISH

Basic First Aid / CPR / AED

ENGLISH AND SPANISH

Fundamentals of Trench Rescue

› 16-HOUR CLASS • ENGLISH

Trench Rescue Awareness

4-HOUR CLASS • ENGLISH • NFPA

› 1006/1670 COMPLIANT

Safety Training



**Sign-up for
training online!**

Visit training.ntsafety.com for
class schedule and details.

Class Information

› LOCATION

Any NTS branch office. NTS also provides offsite training at customer jobsites or offices. All offsite training requires a minimum of 10 attendees per class.

› SCHEDULES & REGISTRATION

Call our office toll free: (888) 234-9244

Online at www.ntsafety.com

Training available Monday through Saturday

NATIONAL TRENCH SAFETY TRAINING DEPARTMENT

260 N. Sam Houston Parkway East,
Suite 200, Houston, TX 77060



Branch Locations

Albany

7 Hemlock St
Latham, NY 12110
518-785-5544

Albuquerque

2440 Phoenix Ave.
N.E.
Albuquerque, NM
87107
Ph. 505-881-4830

Atlanta

4241 Transport City Ct.
Conley, GA 30288
Ph. 866-260-8609

Austin

5106 Commercial
Park Dr.
Austin, TX 78724
Ph. 512-929-8000

Baton Rouge

3136 South Ruby Ave.
Gonzales, LA 70737
Ph. 225-644-2763

Beaumont

5777 S M L King Jr.
Pkwy.
Beaumont, TX 77705
Ph. 409-832-3030

Berthoud

2401 N 1st St.
Berthoud, CO 80513
Ph. 970-532-4066

Birmingham

2650 Crestwood Blvd.
Irondale, AL 35210
Ph. 205-956-1668

Boise

2809 S Liberty St
Boise, ID 83709
Ph. 775-690-8089

Boston

49 Silva Rd.
Dracut, MA 01826
Ph. 978-745-0420

Buffalo

10 Lancaster Pkwy
Lancaster, NY
518-785-5544

Charleston

7285 Peppermill Pkwy.
N Charleston, SC 29418
Ph. 843-767-8878

Charlotte

3521 Asbury Ave.
Charlotte, NC 28206
Ph. 704-344-8081

Chicago

249 West Lake St.
Elmhurst, IL 60126
Ph. 630-832-8068

Chicago #2

1906 E. Cass St.
Joliet, IL 60432
Ph. 815-893-6700

Cleveland

525 Golden Oak Pkwy.
Oakwood Village, OH 44146
Ph. 440-786-9314

Colorado Springs

6820 Dalby Dr.
Colorado Springs, CO 80923
Ph. 719-633-4556

Corpus Christi

605 Cantwell Lane
Corpus Christi, TX 78408
210-328-9202

Dallas

1602 E. 6th St.
Irving, TX 75060
Ph. 214-441-0454

Delmarva

11343 Maryland Ave
Beltsville, MD 20705
Ph. 301-937-1350

Denver

4795 Forest Street
Denver, CO 80216
Ph. 303-341-4498

Downey

13217 Laureldale Ave
Downey, CA 90242
800-821-4478

Fontana

10763 Poplar Ave.
Fontana, CA 92337
Ph. 877-246-4085

Fort Worth

3602 N Sylvania Ave
Fort Worth, TX 76111
Ph. 817-502-1444

Fresno- Central Valley

2790 S. Railroad Ave.
Fresno, CA 93725
Ph. 844-803-8408

Gainesville

2257 Hardwood Circle
Gainesville, GA 30507
Ph. 770-932-2165

Grand Junction

3174 Perkins Dr.
Grand Junction, CO 81504
Ph. 970-523-8520

Greensboro

2039 Willow Springs Ln.
Burlington, NC 27215
Ph. 336-229-1616

Houston

9002 Wayfarer Ln.
Houston, TX 77075
Ph. 713-991-9800

Houston- North

17502 Carlsway Rd.
Houston, Texas 77073
Ph. 866-247-9449

Jacksonville

2515 North Edgewood Ave.
Jacksonville, FL 32254
Ph. 904-786-4100

Lake Charles

3237 Petro Dr.
Sulphur, LA 70665
Ph. 337-882-4905

Las Vegas

2606 East La Madre Way
N. Las Vegas, NV 89081
Ph. 877-809-6493

Manassas

11111 Industrial Rd.
Manassas, VA 20109
Ph. 703-330-5104

Miami

4201 Kean Rd.
Davie, FL 33314
Ph. 954-332-7700

Mobile

5965 Rangeline Rd.
Theodore, AL 36582
Ph. 251-443-7080

Morrisville

616 Nolan Ave.
Morrisville, Pa 19067
Ph. 215-295-4585

Nashville

145 West Trinity Lane
Nashville, TN 37207
Ph. 615-339-5284

Newark

6792 Central Ave.
Newark, CA 94560
Ph. 877-246-4086

Orange County

1908 S Yale St.
Santa Ana, CA 92704
Ph. 800-772-8004

Orlando

307 N. Goldenrod Rd.
Orlando, FL 32807
Ph. 407-282-6407

Parsippany

273 New Rd.
Parsippany, NJ 07054
Ph. 973-882-7750

Phoenix

2950 W. Durango St.
Phoenix, AZ 85009
Ph. 602-272-8660

Pittsburgh

1200 Neville Rd.
Pittsburgh, PA 15225
Ph. 412-331-8118

Provo

2495 Mountain Vista Pkwy.
Provo, UT 84606
Ph. 801-356-0100

Raleigh

600 Bricksteel Ln.
Garner, NC 27529
Ph. 919-977-8440

Red Bluff

13095 Baker Rd.
Red Bluff, CA 96080
Ph. 916-719-9998

Sacramento

2924 47th Ave.
Sacramento, CA 95824
Ph. 800-548-0688

Salt Lake City

3121 West Directors Row
Salt Lake City, UT 84104
Ph. 801-975-9000

San Antonio

3410 N Panam Expy.
San Antonio, TX. 78219
Ph. 866-501-8955

San Diego

9747 Olson Dr.
San Diego, CA 92121
Ph. 800-302-7528

San Francisco Bay Area N.

530 Garcia Ave.
Pittsburg, CA 94565
Ph. 800-321-5550

Seattle

11022 E Marginal Way South
Tukwila, WA 98168
Ph. 206-653-7229

Sparks

2050 Brierley Way
Sparks, NV 89434
Ph. 877-809-6492

St. Louis

8000 Hall St, Building #12
St. Louis, MO 63147
Ph. 314-383-0504

Sylmar

12458 Gladstone Ave.
Sylmar, CA 13217
Ph. 877-246-4087

Tampa

7532 Malta Ln.
Tampa, FL 33637
Ph. 813-248-2495

Ventura & Santa Barbara

10999 Nardo St.
Ventura, CA 93004
Ph. 855-834-9058

NTS Traffic Solutions**Commerce**

2733 Carrier Ave
Irondale, CA 90040
Ph. 866-537-1260

Las Vegas

2606 East La Madre Way
N. Las Vegas, NV 89081
Ph. 877-809-6493

Orange County

1908 S Yale St.
Santa Ana, CA 92701
Ph. 833-918-2705

Riverside

3117 Durahart St.
Riverside, CA 92507
Ph. 855-326-5953

San Leandro

564 143rd Ave.
San Leandro, Ca. 94578
Ph. 855-351-1114

NTS UK Locations**Chinnor, United Kingdom**

128 Station Rd, Chinnor
OX39 4WU, UK
Ph +44 (0) 3332-076007

Leeds, United Kingdom

Unit 28 Moor Lane Trading
Estate, Moxon Way
Sherburn in Elmet,
Leeds, UK, LS25 6ES
Ph. +44 (0) 3332-076007



NATIONAL TRENCH SAFETY

WHERE SERVICE MEETS EXPERTISE.

A DEDICATED TEAM OF
1,000 TRENCH SAFETY
PROFESSIONALS IN THE UNITED
STATES AND THE UNITED
KINGDOM



CORPORATE

260 NORTH SAM HOUSTON PKWY E #200
HOUSTON, TX 77060

PHONE (832) 200-0988
FAX (832) 200-0989

INFO@NTSAFETY.COM
WWW.NTSAFETY.COM

