



INVITATION TO BID

(This is not an order.)

Page 1 of 2

CITY OF CLEVELAND

Division of Purchases & Supplies
601 Lakeside Avenue
Room 128
Cleveland, OH 44114

Buyer: Gregory Hart
216-664-7076
ghart@clevelandohio.gov

Requestor: David Bass
216-664-3352
dbass@clevelandohio.gov

Procurement Folder	RFB No.	RFB Description
160964	RFB 7017 202600000000384	Flex Post Installation
RFB Closing Date/Time	Department/Division	Public Bid Opening Date/Time
August 10, 2026 3:00 PM	7017	August 10, 2026 3:00 PM

SCHEDULE OF EVENTS

Event Description			Event Date	
Group/Line#	Commodity Description	Item Quantity/UOM	Service Dates	Catalog Discount
1 / 1	Bollards		From To	

Vendor to supply 150 Qwick Kurb Big Bollards (Short L1265SH) with Slender Bender L54 bases (see attached specs), or approved equal, and install said flex posts along the W. 65th Street bike lanes between Lorain Ave and Denison Ave as per plan for the Division of Traffic Engineering. Awarded PO shall not exceed \$49,999.

Ship To:

Traffic Engineering City Hall
Traffic Engineering City Hall
601 Lakeside Ave Rm. 518
Cleveland, OH 44114

Vendor Response

Contract Amount

\$

Vendor Response	Vendor Total Amount for Items	Vendor Total Amount for Services	Payment Discount Offer	
	\$	\$	%	Day(s)

TERMS OF DELIVERY

- Price quoted shall be F.O.B. delivered to the place designated on purchase order. No other terms will be acceptable.
- Delivery quoted must be stated in terms of work days after receipt of the order.
- All charges for shipping must be included within the Unit Price for each item quote unless otherwise designated by a separate line with a specified dollar amount inclusive of all shipping charges.
- No freight charges will be considered nor processed for payment unless apart of the original quote submitted prior to bid award.

BIDDER AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS BELOW AND ON REVERSE SIDE OF THIS BID

Shipping/Freight Charges

ALL CHARGES FOR SHIPPING MUST BE INCLUDED WITHIN THE UNIT PRICE OF EACH QUOTE UNLESS OTHERWISE DESIGNATED BY A SEPARATE LINE ITEM WITH A SPECIFIED DOLLAR AMOUNT INCLUSIVE OF ALL SHIPPING CHARGES.

NO FREIGHT CHARGES WILL BE CONSIDERED NOR PROCESSED FOR PAYMENT UNLESS APART OF THE ORIGINAL QUOTE SUBMITTED PRIOR TO BID AWARD.

Call Buyer Only

Bidders must address all questions to the Buyer (See Above.) Do NOT contact the "Requestor." Contract only the Buyer listed above.

No Price increase

This Purchase Order does not permit price increases.



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Missing information

It is each bidder's individual responsibility to determine for themselves, in advance of bid submission, the accuracy and completeness of any and all information in an RFB. If a potential bidder does not notify the Division of Purchases and Supplies in advance of the bid opening date of any possible discrepancy then any such discrepancy or erratum cannot be the basis for a protest of award. Contact the Buyer immediately if there is a question of accuracy or completeness in these bid documents.

BIDDER MUST COMPLETE & SIGN BELOW

NAME OF THE FIRM:

STREET ADDRESS:

CITY: STATE: ZIP CODE:

FED ID # / SSN #:

PHONE NO.: FAX NO.:

EMAIL ADDRESS:

PLEASE PRINT CONTACT NAME:

AUTHORIZED SIGNATURE: DATE:

All bids and related documents must be enclosed in a sealed envelope and marked with the RFB number.

RETURN BID TO: Division of Purchases & Supplies
601 Lakeside Ave
Room 128, City Hall
Cleveland, OH 44114

Effective Immediately: In accordance with Codified Ordinance 181.13 (I) the City shall receive competitive sealed bids through email. All City of Cleveland bids estimated to be less than 50K in value will be submitted and received electronically via email. All bids must be emailed to CityofClevelandbids@clevelandohio.gov. Upon receipt of your bid, you will receive a reply indicating your bid has been received.

Bidder's Instructions

See enclosed Terms & Conditions. Read and follow all terms and conditions of the bid.

Bids must be submitted to CityofClevelandbids@clevelandohio.gov, the Document ID Number and Buyer's Name must be identified in the email subject line. Also clearly state the Document ID Number, Bid Description, Buyer's Name and Closing Date.

PLEASE NOTE: Bids received after the Closing Date, Closing Time or sent to any other email address not identified in the Bidders Instructions cannot be considered.

Northern Ireland Affidavit must be completed, signed and included with each bid.

The bid must be submitted to: CityofClevelandbids@Clevelandohio.Gov

The bid documents must include:

- ☐ The Document ID Number and Buyers Name in email subject line
- ☐ PDF File of Request For Bid Form
- ☐ Terms & Conditions.
- ☐ Northern Ireland Affidavit.
- ☐ Wage Theft Form.

Contact the Buyer immediately at the number on the Bid Form if you do not have all the required documents.

Subject: Submission of NORTHERN IRELAND FAIR EMPLOYMENT PRACTICES DISCLOSURE

Each bidder and/or appropriate parties should complete the DISCLOSURE and submit it with the bid, if possible. If not submitted with the bid, it must be completed and submitted to the Commissioner of Purchases and Supplies prior to any contract being awarded by the City. If a bidder or appropriate parties fail to complete and submit it, they shall not be eligible for a contract award.

NORTHERN IRELAND FAIR EMPLOYMENT PRACTICES DISCLOSURE

INSTRUCTIONS: Pursuant to Codified Ordinance Sec. 181.36, the information requested on this page must be supplied by all Contractors and any Subcontractors having more than a fifty percent (50%) interest in the proposed contract prior to any contract being awarded by the City of Cleveland. Any Contractor or Subcontractor who is deemed to have made a false statement shall be declared to have acted in default of its contract and shall be subject to the remedies for default contained in its contract. For failure to cure such a default, the Contractor or Subcontractor shall be automatically excluded from bidding for the supply of any goods or services for use by the City for a period of two years.

CHECK WHICHEVER IS APPLICABLE:

A. () The undersigned or any controlling shareholder,* subsidiary, or parent corporation of the undersigned is NOT ENGAGED IN ANY BUSINESS OR TRADING FOR PROFIT IN NORTHERN IRELAND. (If paragraph A. is checked, proceed to the signature line.)

B. () The undersigned or any controlling shareholder,* subsidiary, or parent corporation IS ENGAGED IN ANY BUSINESS OR TRADING FOR PROFIT IN NORTHERN IRELAND. (If paragraph B. is checked, please either check the stipulation contained in paragraph C. or attach documentation that shows that the undersigned has complied with the stipulation contained in paragraph C.

C. () The undersigned and all enterprises identified in paragraph B. are TAKING LAWFUL AND GOOD FAITH STEPS TO ENGAGE IN FAIR EMPLOYMENT PRACTICES WHICH ARE RELEVANT TO THE STANDARDS EMBODIED IN THE "MacBRIDE PRINCIPALS FOR FAIR EMPLOYMENT IN NORTHERN IRELAND." A copy of the MacBride Principles can be obtained from the Office of the Commissioner of Purchases and Supplies. In lieu of checking this paragraph, the undersigned must attach documentation which the undersigned believes shows compliance with the stipulation contained in this paragraph C.

Name of Contractor or Subcontractor

By: _____

Title: _____

*"Controlling shareholder" means any shareholder owning more than fifty percent (50%) of the stock in the corporation or more than twenty-five percent (25%) of the stock in the corporation if no other shareholder owns a larger share of stock in the corporation.



WAGE THEFT AND PAYROLL FRAUD DISCLOSURE

SUMMARY:

Bidders on certain City contracts, recipients of Assistance, and any of their prospective subcontractors must disclose any wage theft or payroll fraud violations over the last three years. Unless they receive a waiver from the City's Fair Wage Employment Board, violators are placed on the City's Adverse Determination List, which prevents them from entering into new contracts with or receiving Assistance from the City. This disclosure requirement and the waiver process are set forth in Chapter 190 of the Codified Ordinances of Cleveland, Ohio, 1976 ("Chapter 190").

INSTRUCTIONS:

Pursuant to Chapter 190, the information requested on this document must be provided by any person or entity bidding on or making a proposal for a Construction or Improvement Contract or a Service Contract, or applying for Assistance, and any of their prospective subcontractors.

Any person or entity that is deemed to have made a false statement shall be declared to have acted in default of its contract and shall be subject to the remedies for default contained in its contract.

DEFINITIONS:

"Adverse Determination" means a final action or adjudication that the person or entity in question has committed Wage Theft or Payroll Fraud and is further defined in Chapter 190.

"Assistance" means any form of City financial assistance, except for financial assistance provided for the development, rehabilitation or other means of providing residential housing. Assistance includes but is not limited to: grants; economic development loans; tax credits, incentives and abatements; subsidies; and bonds. Assistance does not include financial assistance which is received from another government or other entity with the City acting only as a conduit or fiscal agent for the funds, where the City exercises no control over the identity of any recipient or of the terms of the contract. Community Development Block Grant Funds are not considered conduit funds and, to the extent they otherwise qualify, are included as Assistance.

"Construction or Improvement Contract" means any contract entered into pursuant to Chapter 167 or Chapter 185 of the Codified Ordinances.

"Payroll Fraud" means concealing an entity's true payroll tax liability or other financial liability to a government agency from government licensing, regulatory or taxing agencies through misclassification of employees, failure to report or underreported



payment of wages, or executing a cash transaction while failing to maintain proper records of reporting and withholding.

“Service Contract” means any contract or subcontract between a person, business or corporation and the City of Cleveland that primarily involves the furnishing of services to the City (as opposed to the purchase of goods or other property or the leasing of property), and shall be limited to the following categories of services: food service, janitorial, security services, parking lot attendants, home health care, health care aides, waste management, automotive repair services, landscaping, towing contracts, building and maintenance services, carpentry, clerical services, urban forestry, housekeeping, street maintenance and repair, and sidewalk maintenance and repair. This includes services performed on City-owned premises including the following City-owned locations: airports, parking lots, municipal parks, recreational facilities, and City-owned buildings. Contracts that are primarily for the purchase of goods or other property are not considered Service Contracts.

“Wage Theft” means a violation of the Ohio Prompt Pay Statute, RC 4113.15; the Ohio Minimum Fair Wage Standards Act, RC Chapter 4111; Oh. Const. Art. II, Sec. 34a; RC Chapters 4109 or 4115; RC 4113.17, 4113.18, 4113.52 or 4113.61; or a violation of any substantially equivalent federal or state law; as any of these laws may be amended or superseded.

CHECK WHICHEVER IS APPLICABLE:

(A) (☐) The undersigned person or entity HAS NOT had any Adverse Determinations within the last three (3) years.

(B) (☐) The undersigned person or entity HAS had any Adverse Determinations within the last three (3) years.

If (B) is checked, then in an attachment(s) to this form, please disclose all Adverse Determinations within the last three (3) years.

Name of Person or Entity: _____

Signature: _____

Printed Name of Signatory: _____

Title of Signatory: _____

Date: _____

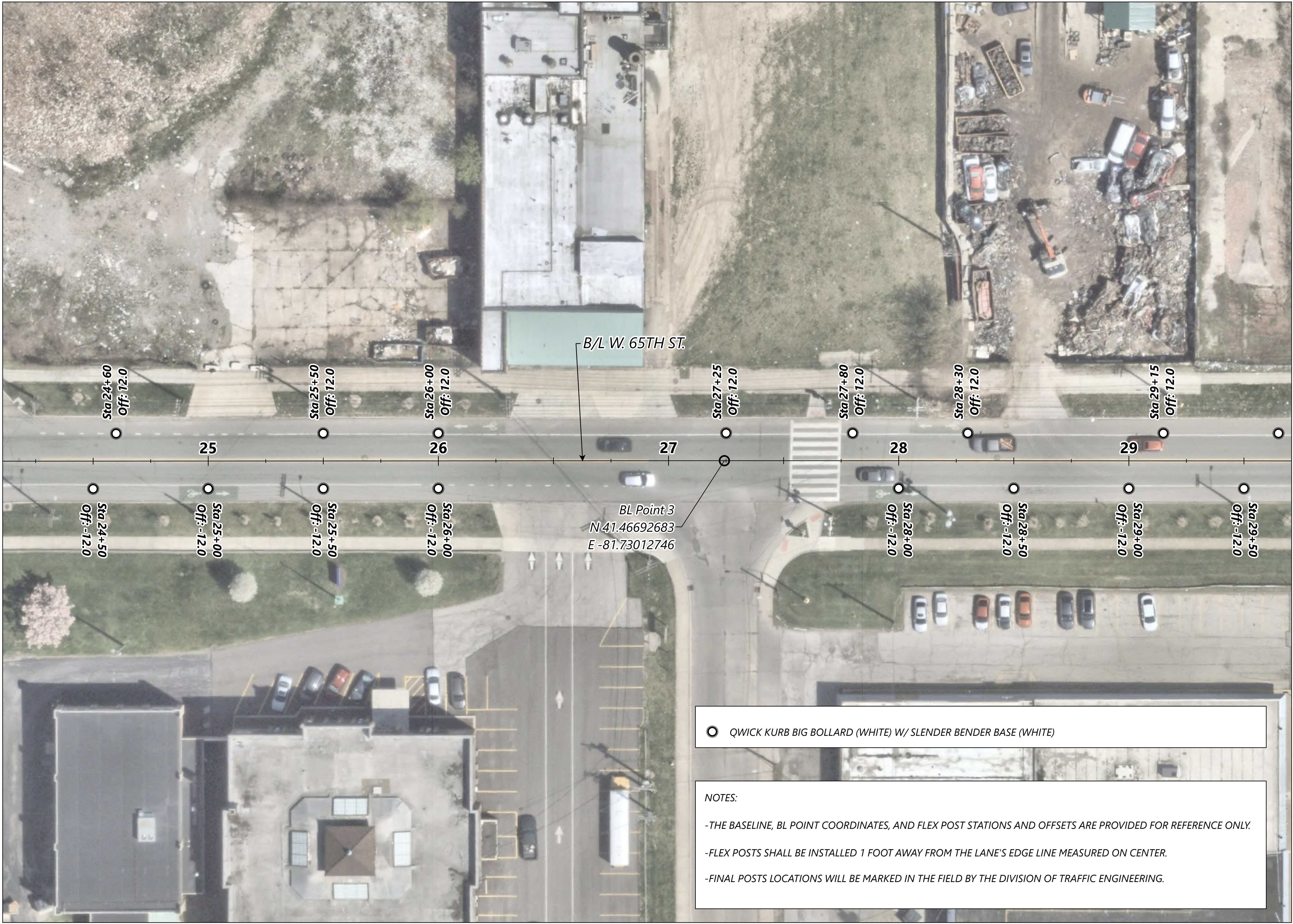
























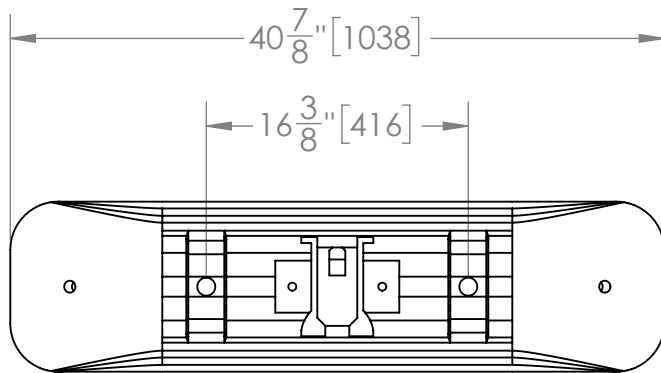
○ QWICK KURB BIG BOLLARD (WHITE) W/ SLENDER BENDER BASE (WHITE)

NOTES:

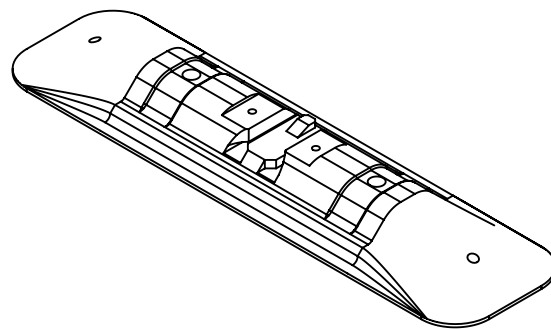
- THE BASELINE, BL POINT COORDINATES, AND FLEX POST STATIONS AND OFFSETS ARE PROVIDED FOR REFERENCE ONLY.
- FLEX POSTS SHALL BE INSTALLED 1 FOOT AWAY FROM THE LANE'S EDGE LINE MEASURED ON CENTER.
- FINAL POSTS LOCATIONS WILL BE MARKED IN THE FIELD BY THE DIVISION OF TRAFFIC ENGINEERING.

2

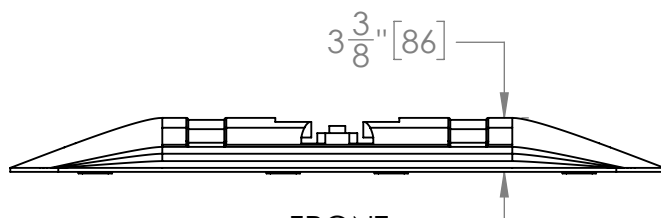
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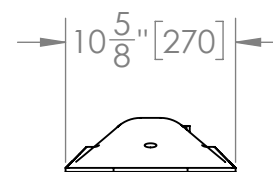
TOP



ISOMETRIC



FRONT



RIGHT

2

1

QWICK KURB[®], INC.

L54 Long Base Installation Manual[©]

1916 US 41 South, Ruskin, FL 33570

Phone: 813-645-5072

www.qwickkurb.com



Version 2.1 August 31, 2023

TOOLS AND EQUIPMENT CHECKLIST

For a typical installation, we recommend the items listed below.

NOTE: Always follow manufacturers' instructions when using any power, impact or other tools and equipment.

Item	Description
5 Horsepower Generator	5,000 watts.
Variable Speed Rotary Hammer	300-700 no load rpm and 1,650-3900 rpm; 1" bit capacity, e.g., Bosch Terminator Model 11222EVSG or Milwaukee Hawk ® Model 5362-1. Drills holes into asphalt or concrete for anchors.
Carbide Tipped Bits for Rotary Hammer	ANSI diameter 3/4"; minimum usable length 10". The quantity needed depends on the length and number of installations and the density of the underlying material.
Electric Impact Wrench	1/2"; maximum torque 330 ft. lbs., e.g., Ingersoll-Rand Model IR8053 or DeWalt Model DW290
15/16" Shallow Socket	Use with electric impact wrench to tighten FS50 anchor sets (for asphalt or flexible road base).
1 1/8" Shallow Socket	Use with electric impact wrench to tighten FS51 anchor sets (for concrete surfaces).
Electric Drill	1/2"; 0 to 550 rpm, variable speed e.g., Makita Model 6402 and a 7/16" Six Point Socket - installs S65 black Securing Arcs (use the low setting torque avoid stripping the screw heads).
Extension Cord	50 foot heavy duty grade 12 gauge.
Rubber Hammer	Assists in tapping the markers/bollards and L65 Reflective Arcs into place.
Hammer	Taps anchors into the drilled holes.
Soapy Water	Assists in sliding the markers/bollards into place.
Stiff Broom	Clears debris from the intended placement location for the L54 LONG BASE.

To install a large number of markers/bollards you may wish to purchase our Q640 Panel Puller. Refer to **Appendix A Page 13** for more information.

PARTS CHECKLIST

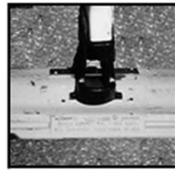
Refer to the **Illustrated Parts** section for a close up view of the parts listed below.

Part Number	Description	Quantity
L54	QWICK KURB® LONG BASE Unit	The number ordered.
L65	Reflective Arc	The number ordered (Optional)
S65	Black Securing Arc	(2) per marker/bollard - Secures each marker/bollard's reboundable Flex Boot.
L84	Short Delineator	The number ordered.
L104	Reboundable Mega Marker®	The number ordered.
L125	Reboundable Big Bollard®	The number ordered.
L125sh	Reboundable Short Big Bollard®	The number ordered.
FS50	Asphalt 5/8"x 3 1/2" Cloverleaf Mollies, 5/8"x 6" Lag Bolts, and 5/8" Washers	The number ordered – (2) per L54 LONG BASE.
N/A	2 1/2" Hex Screws	(2) For each black Securing Arc.
N/A	4" Hex Screws	(1) For each black Securing Arc.

ILLUSTRATED PARTS



S65 BLACK SECURING
ARC



REBOUNDABLE
FLEX BOOT WITH
STABILIZING BAR



L65 REFLECTIVE ARC

L125sh SHORT BIG BOLLARD



L014 MEGA-MARKER



FS50 ASPHALT
BOLT AND
MOLLY

L84 FLAT MARKER



L54 LONG BASE

PREPARING THE ROADWAY FOR INSTALLATION

CLEANING THE ROADWAY SURFACE

QWICK KURB® is designed for mounting on generally flat asphalt and concrete surfaces. A long-term installation of the L54 LONG BASE on gravel, dirt roads, or other loose surfaces may not be effective. Usually, a stiff broom is adequate to prepare an area free from gravel, cinders, sand, and other debris.

The L54 LONG BASE should not be installed on top of reflective pavement markers (RPMs). Preferably, arrange the alignment of the L54 LONG BASE to the side of any RPMs in the installation area, or remove the RPMs if appropriate for the conditions. Remove any surface mount delineator that is in the L54 LONG BASE'S intended position. If the surface is highly irregular, e.g., cobblestones, potholes, etc., or of unstable material which may break or separate if drilled, such as paving bricks, etc., an alternative to the L54 LONG BASE in that position may be necessary.

INSTALLING THE L65 REFLECTIVE ARCS

The L65 Reflective Arcs (Optional Component) may be added before or after bolting the L54 LONG BASE units to the roadway.

To add the L65 Reflective Arcs:

1. Insert one or two Reflective Arc's post into the holes (Fig 1) on each L54 LONG BASE units and tap it into place gently with a rubber hammer (if you hammer too hard you may pop out a cats eye).



Fig 1

INSTALLING TO THE ROADWAY

FINE TUNING

After the L54 LONG BASE unit is in position and before drilling is complete, inspect for correct alignment.

BOLTING TO THE ROADWAY – ASPHALT OR CONCRETE

To bolt to the roadway:

Each L54 LONG BASE unit has two holes located on opposing sides that are angled toward the center of the L54 LONG BASE. Each hole is sized to accommodate the plastic expansion anchor.

1. Drill holes to a minimum depth of 8".

TIP: Place a mark on the drill bit 8" from the tip.

2. Using the rotary hammer with the 3/4" bit, insert the bit through the angled hole, and drill into the asphalt road. Do not drill straight down, but rather follow the same angle of the pre-drilled hole in the L54 LONG BASE. When the marked point on the bit is flush with the L54 LONG BASE, a depth adequate to accommodate the bolt and anchor, stop drilling.

TIP: If you have two drills, installers can drill in accord on opposing sides of the L54 LONG BASE.

3. Place a washer on a lag screw, and insert the lag screw into the plastic expansion anchor.

NOTE: This anchor assembly may be built prior to mobilizing on the job site.

4. Use the *small* hammer to tap the bolt through the hole until it pushes the plastic expansion anchor through, and bottoms out under the pavement.
5. Use the impact wrench with a 15/16" socket to tighten the bolt until the washer is *snug* against the L54 LONG BASE unit and the plastic expansion anchor widens beneath the road surface.

CAUTION: *NEVER* install a bolt without the washer and anchor.

HINT: Temperature extremes can cause the L54 LONG BASE to contract and expand slightly even during the short installation time. Therefore, if you drill all of the holes of many L54 LONG BASES at one time, you may discover that some of the holes in the L54 LONG BASES no longer align with the holes you have drilled into the pavement. Ideally, a second installer installs the anchor bolt shortly after the first installer drills the hole.

Occasionally, such as on bridge decks and in tunnels, there are depth restrictions for anchor penetration. For 3" maximum depth penetration, use a 5" long lag bolt. Place a mark on the drill bit 5-1/4" from the tip, and proceed as indicated above. When measured vertically, the hole will be no more than 3" in depth. For more stringent depth restrictions, contact QWICK KURB®, INC. Customer Service.

INSTALLING THE MARKERS/BOLLARDS

The marker/bollard is best added after the L54 LONG BASE is bolted into position on the roadway. The reboundable Flex Boot of the marker/bollard has a narrow edge and a tall edge. The narrow edge of the reboundable Flex Boot of the vertical marker/bollard fits into the center slot of the L54 LONG BASE. Notice that there is a small wedge in the slot (Fig 2). It is easier to insert the reboundable Flex Boot in the side where the wedge is located, but inserting from either side is effective.

NOTE: *The L84 Flat Marker does not have a stabilizing bar.*

WEDGE IN THE SLOT

**NARROW SIDE OF
THE FLEX BOOT**



Fig. 2

Use soapy water to lubricate the bottom of the marker/bollard and the slide-in slots in the center of the one-meter L54 LONG BASE. Do not use silicone or petroleum-based lubricants because residue may allow the markers/bollards to ease up from the L54 LONG BASE and cause them to lean.



Fig 3

Position the reboundable Flex Boot into the L54 LONG BASE slot with the narrow edge facing toward the L54 LONG BASE. Give it a gentle tap so that the marker/bollard stands on its own (Fig 3).

Continue to tap the base with a rubber hammer, while pulling, to help the marker/bollard slide into the slot. The reboundable Flex Boot has two sloping ends to assist sliding it into the L54 LONG BASE (Fig 4).



Fig. 4

HELPFUL HINT: If the Flex Boot resists sliding into the slot, insert a pry bar between the road and the L54 Long Base beneath the slot and raise slightly while tapping the Flex Boot. Raising the L54 Long Base at the slot will spread open the slot slightly to allow easier insertion of the Flex.

The Stabilizing Bars (metal flanges) protruding from the sides of the reboundable Flex Boots are designed to rest tightly on top of the L54 LONG BASE. Accordingly, do not be concerned if the Stabilizing Bars scrape the top of the L54 LONG BASE during installation.

ALTERNATE METHOD: THE Q640 PANEL PULLER TOOL

For easiest installation, we recommend using the Q640 Panel Puller tool. Marker/bollard installation is faster and easier. Refer to **Appendix A** for a description and instructions.

SECURING THE MARKER/BOLLARD WITH THE S65 BLACK SECURING ARCS

There are two S65 black Securing Arcs for the Flex Boot of each marker/bollard. Each S65 black Securing Arc has two short hex head screws and one long hex head screw.

NOTE: This section does not apply to the L84 Flat Marker/Bollard. The L84 Flat Marker/Bollard does not require S65 black Securing Arcs.

IMPORTANT: You must install all 3 screws in each S65 black Securing Arc. Start with the longer 4" screw that installs in the top hole of the S65 black Securing Arc. If you use the short screws first, the Securing Arc will not be tight enough on top.

The S65 black Securing Arcs serve two purposes: Discourages theft and strengthens the reboundable Flex Boot connection.

Securing the Stabilizing Bars that protrude from the reboundable Flex Boot reduces the chance of the reboundable Flex Boot popping out of the L54 LONG BASE'S slot upon a severe vehicular impact on the marker/bollard.

To secure the markers/bollards:

1. Position the Stabilizing Bars so that their holes are above the pre-molded holes in the top of the L54 LONG BASE. (Fig 5). If necessary, use the rubber hammer to align the Stabilizing Bars with the pre molded holes.



Fig. 5

2. Place a black Securing Arc on the L54 LONG BASE, snugly against one side of the marker/bollard's reboundable Flex Boot, aligning the hole with the hole in the Stabilizing Bar and the hole in the L54 LONG BASE.
3. Place the long screw through the single top hole of the S65 black Securing Arc, and tighten securely.

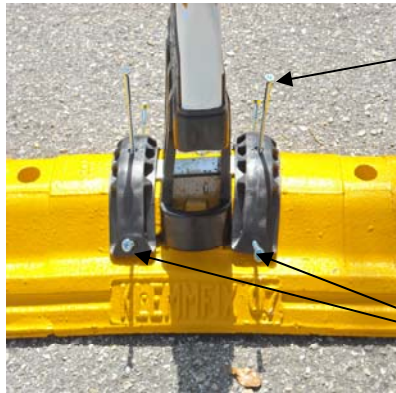
IMPORTANT: The 4" screw must be installed first. For all screws use a 7/16" Six Point Socket to avoid stripping the screw heads. If using an electric drill, DO NOT EXCEED 800 RPM.

4. Place two short screws into the two side holes of the S65 black Securing Arc, and tighten securely.
5. Repeat the process with a second black Securing Arc on the other side of the reboundable Flex Boot (Fig 6). Continue the process of installing two S65 black Securing Arcs for each marker/bollard's reboundable Flex Boot.



**The Black
Securing Arc
Requires All 3
Screws**

**Top long screw
installs FIRST.**



4" SCREWS - FIRST

2 1/2" SCREWS - SECOND

Fig. 6

REMOVAL

Unlike asphalt or concrete curb, QWICK KURB® is *reusable*. It can be removed to make way for repaving, and then reinstalled inexpensively. Only the plastic expansion mollies and concrete anchor assemblies must be abandoned and replaced.

REMOVING THE MARKERS/BOLLARDS

1. Unscrew the S65 black Securing Arcs. Save the hardware and the S65 black Securing Arcs. Slide the markers/bollards out of the L54 LONG BASE. Use a rubber hammer to tap the marker/bollard's reboundable Flex Boot.

NOTE: If you have adequate storage space, you may skip this step and leave the markers/bollards in the L54 LONG BASE.

REMOVING THE L65 REFLECTIVE ARCS

We recommend leaving the L65 Reflective Arcs attached for storage.

UNBOLTING FROM THE ROADWAY

1. Use the impact wrench with the 15/16" socket to back out each of the asphalt lag bolts. Save the undamaged bolts and washers for the next installation.

APPENDIX - A Q640 PANEL PULLER INSTRUCTIONS

QWICK INSTALLATION

The reboundable Flex Boot of the marker/bollard has a narrow edge and a tall edge. The narrow edge of the reboundable Flex Boot of the vertical marker/bollard fits into the center slot of the L54 Long Base. Notice that there is a small wedge in the slot (Fig 1). It is easier to draw the reboundable Flex Boot from the opposite side of where this wedge is located, but drawing from either side is effective. Your Panel Puller will grip the horizontal band of the short edge.

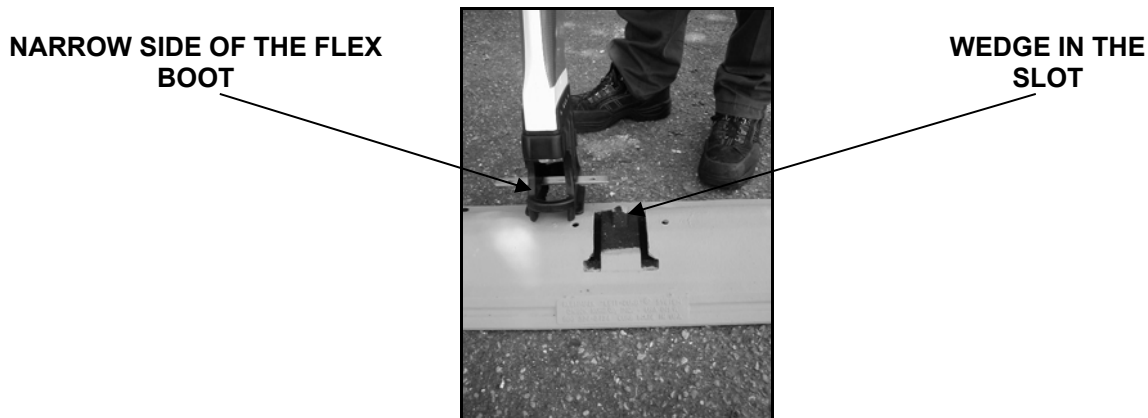


Fig 1

To use the Q640 Panel Puller:

TIP: Dip the reboundable Flex Boot into soapy water to start. (See page 8.)

1. Position the reboundable Flex Boot into the L54 Long Base slot with the narrow edge facing toward the L54 Long Base. Align the reboundable Flex Boot into the slot, and start it with a gentle kick or hammer tap so that the marker/bollard stands on its own.
2. Tilt the Panel Puller toward the reboundable Flex Boot and use the steel hook to grab the horizontal edge of the boot. If the metal flanges of the Stabilizing Bar scrape the top of the L54 Long Base, you may have to tap them with a hammer while pulling. Position the holes of the metal flanges to align with the small holes in the top of the L54 Long Base.



Fig 2

3. Bring the base plate of Panel Puller toward yourself so that it sets flat on the roadway surface, flush against the L54 Long Base.

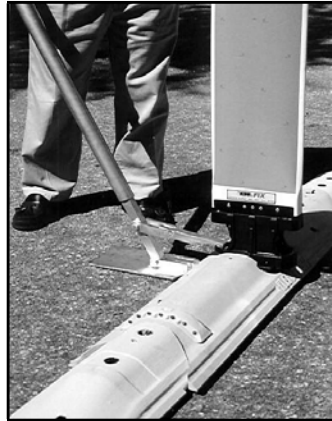


Fig 3

4. Use the long Panel Puller handle to pull the reboundable Flex Boot through the L54 Long Base. If the reboundable Flex Boot misaligns as it moves through the L54 Long Base, maneuver the Panel Puller to the left or right to make adjustments (Fig 8). Remember the soapy water if you have difficulty.



Fig 4

APPENDIX - B Installing New Markers/Bollards to the reboundable Flex Boot

TRAFFIC CONSIDERATIONS

Whenever possible close both adjoining lanes to traffic when replacing markers/bollards on the road. If one lane must be kept open, take care to assure that all equipment and personnel are kept clear of the open travel lane. Observe all traffic control regulations. Use flaggers, law enforcement officers, flashing arrow boards, attenuators and other safety devices as necessary for the conditions present.

REMOVING THE OLD MARKER/BOLLARD TOP FROM THE REBOUNDBLE FLEX BOOT

1. With the old marker/bollard top and reboundable Flex Boot still attached to the L60 SEPARATOR, step on the side of the old marker/bollard to bend it down to the pavement so that you can access the bottom of reboundable Flex Boot.
2. Remove the nuts and washers that attach the old marker/bollard top to the reboundable Flex Boot.
3. Pull up on the old marker/bollard top to detach it from the reboundable Flex Boot

PREPARING THE NEW MARKER/BOLLARD FOR INSTALLATION ON THE REBOUNDBLE FLEX BOOT

1. Remove nuts and washers from the new marker/bollard top.

CAUTION: Be careful that bolts do not slip up into marker/bollard or they will be lost. Keep the bolts pointed down at all times, but do not rest the bolts on a hard surface.

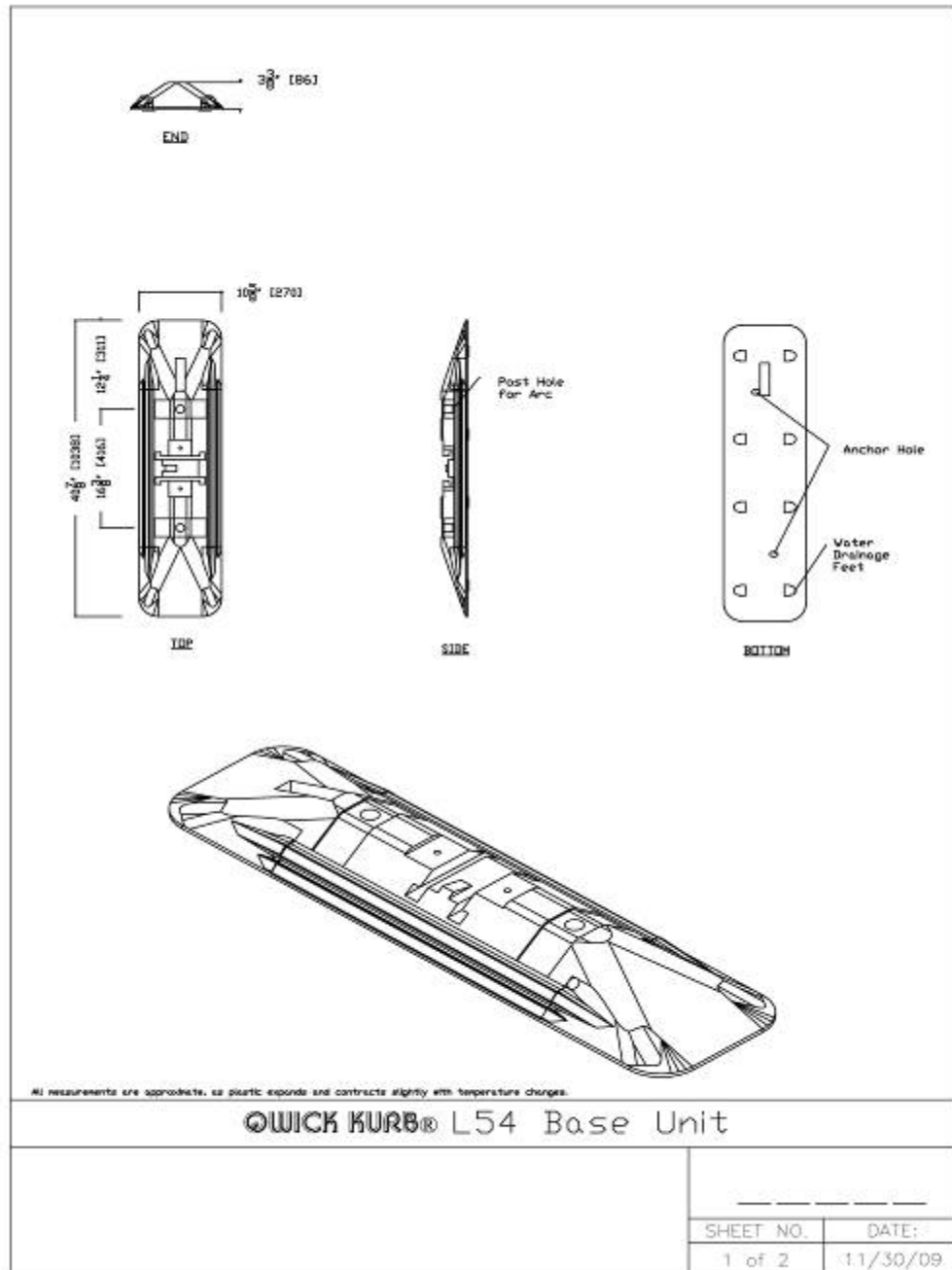
2. Pull firmly on the bolt to assure that proper amount of threads are visible. Twist the bolt head if necessary to properly seat it in its plastic holder.
2. Apply a lubricant such as soapy water to the plastic teeth so that they can pass through the slot in the top-center of the reboundable Flex Boot.
3. Install the bolts of the new marker / bollard top into the holes on the Reboundable Flex Boot, being careful not to allow the bolts to slide up into the marker / bollard where they would be lost. At this point, the teeth, even

with lubrication, will probably not go into the reboundable Flex Boot. Thus, the bolts will not protrude fully through the holes at this state.

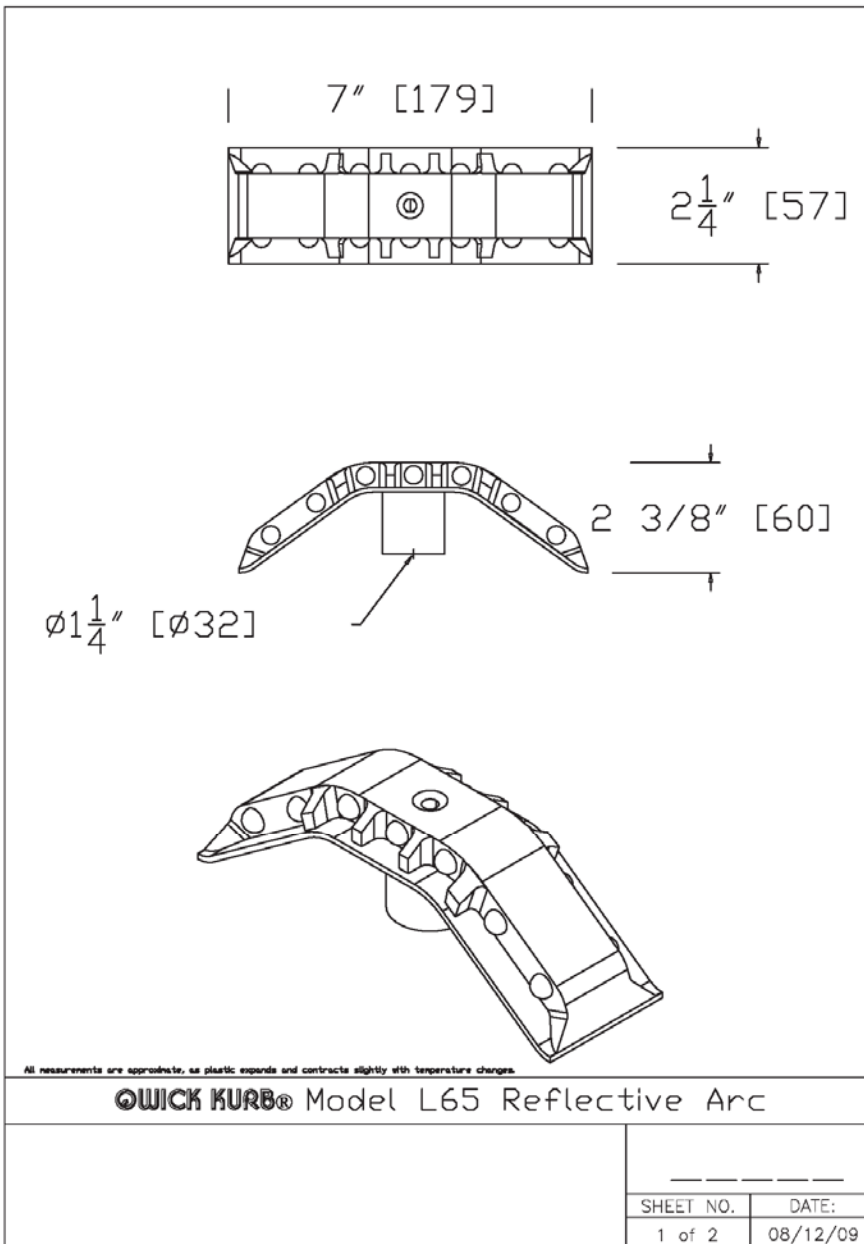
5. Tilt the new marker/bollard top edgeways so that you can force one bolt through one of the holes sufficiently enough to install the washer and thread the nut several turns.
6. Tilt the new marker/bollard top to the other side, so that you can force the other bolt through its hole, and install the washer and thread the nut several turns.
7. Tighten both nuts firmly.
8. Firmly press down on the new marker/bollard top to *pop* the teeth through the slots in the reboundable Flex Boot.
9. Bend the new fully assembled marker/bollard back and forth to test that the teeth have passed through the reboundable Flex Boot.

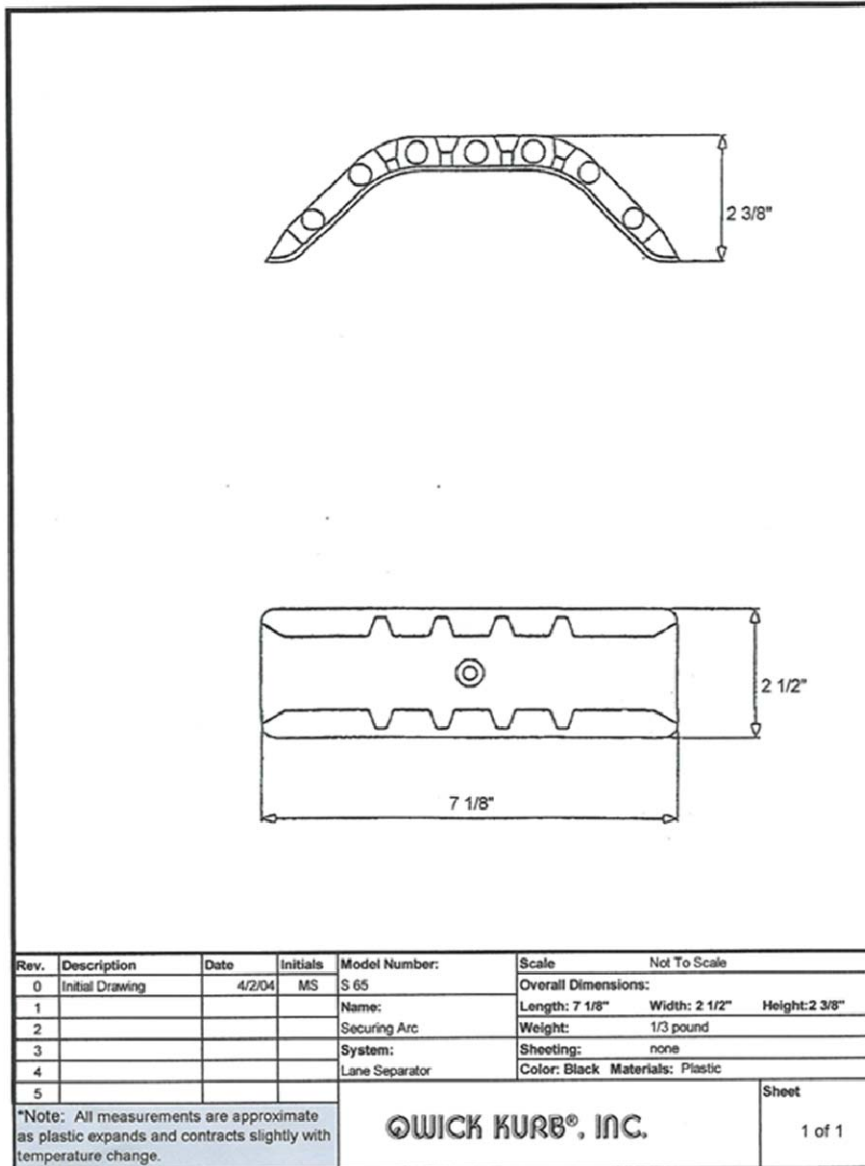
APPENDIX - C Parts Specifications

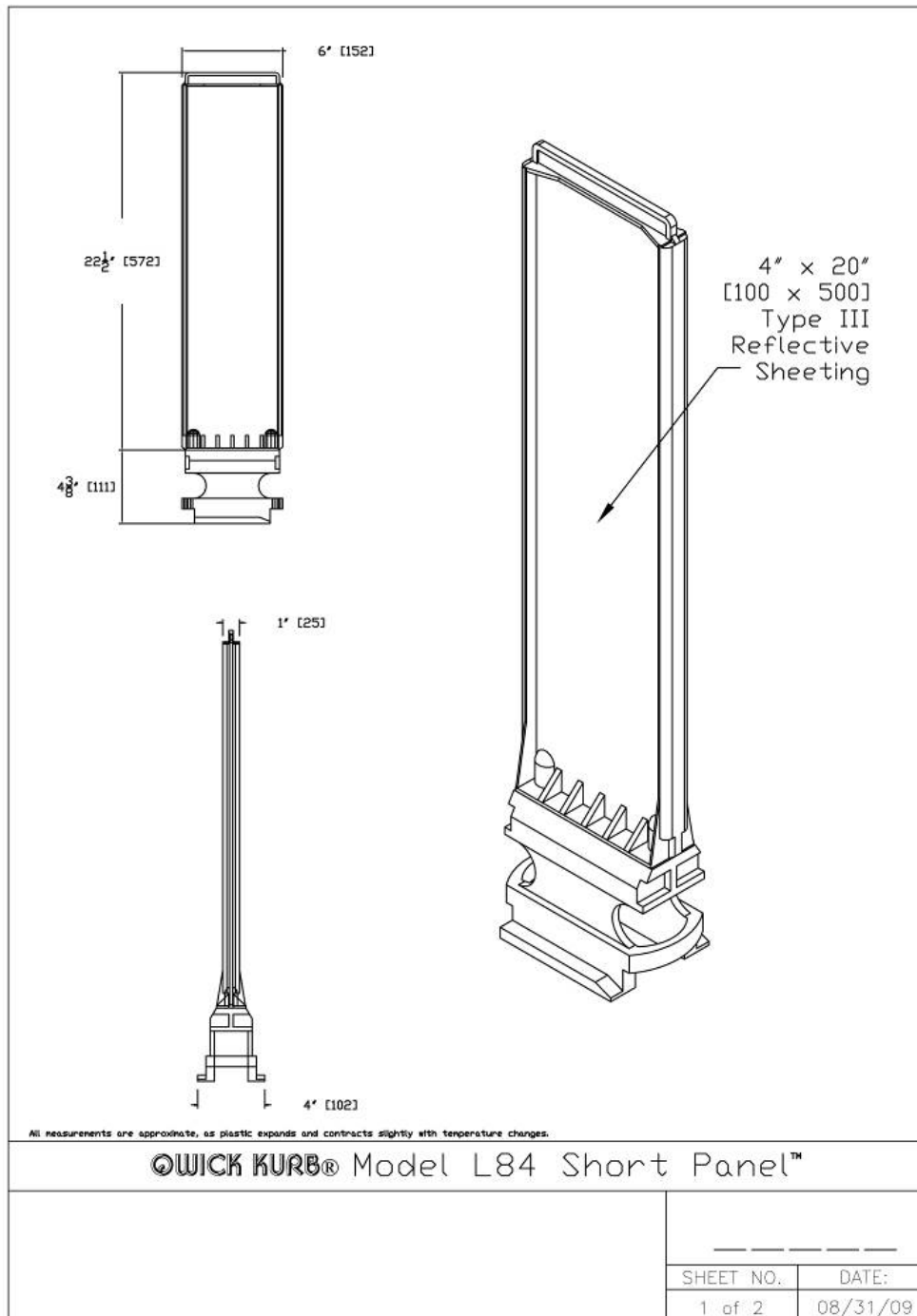
L54 LONG BASE UNIT



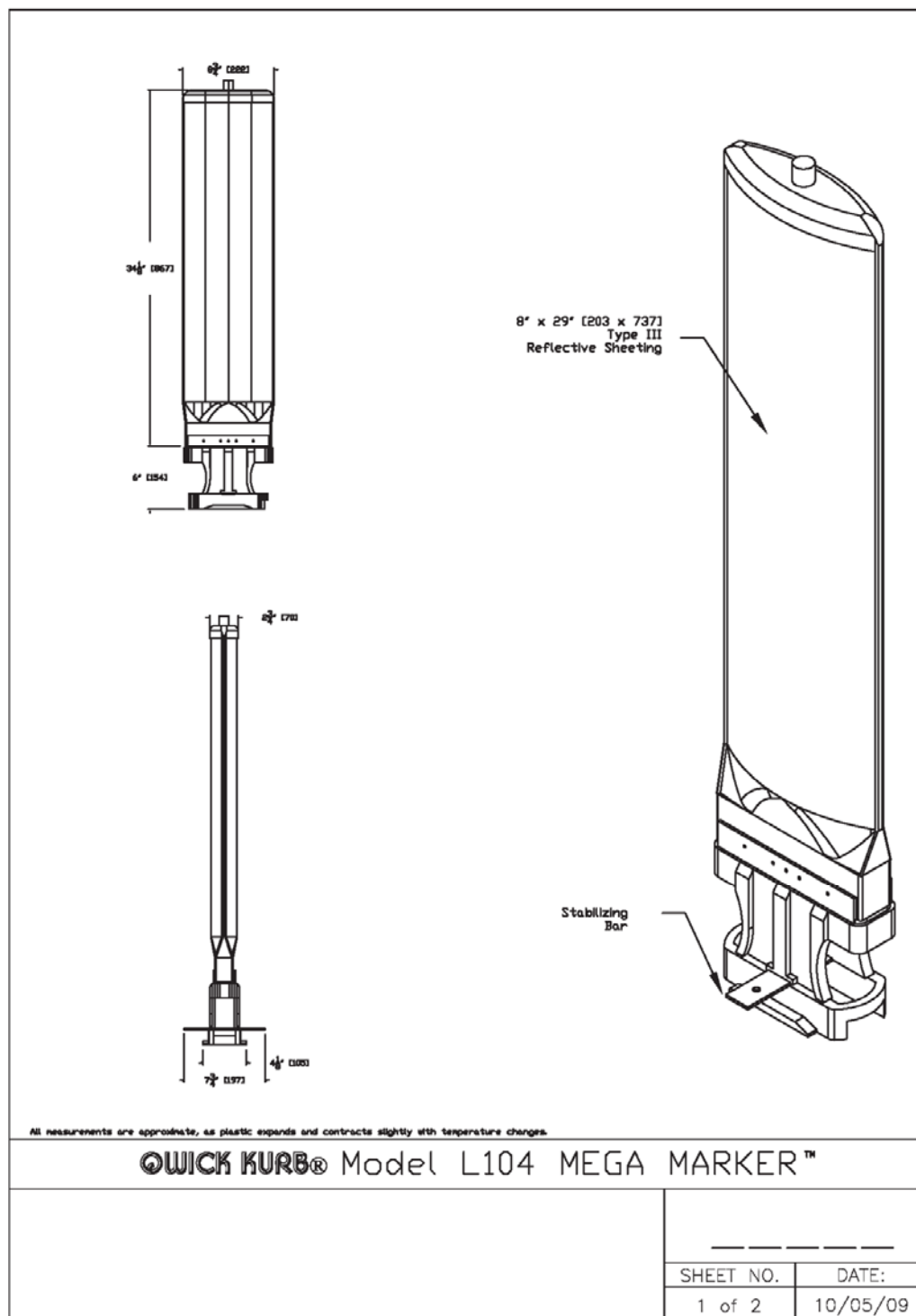
L65 REFLECTIVE ARC



S65 SECURING ARC

L84 FLAT MARKER

L104 MEGA MARKER®



34 1/2" (1381)

6" (152)

7 3/4" (197)

34 1/2" (1381)

4' x 15' (102 x 381)
Type III
Reflective Sheeting

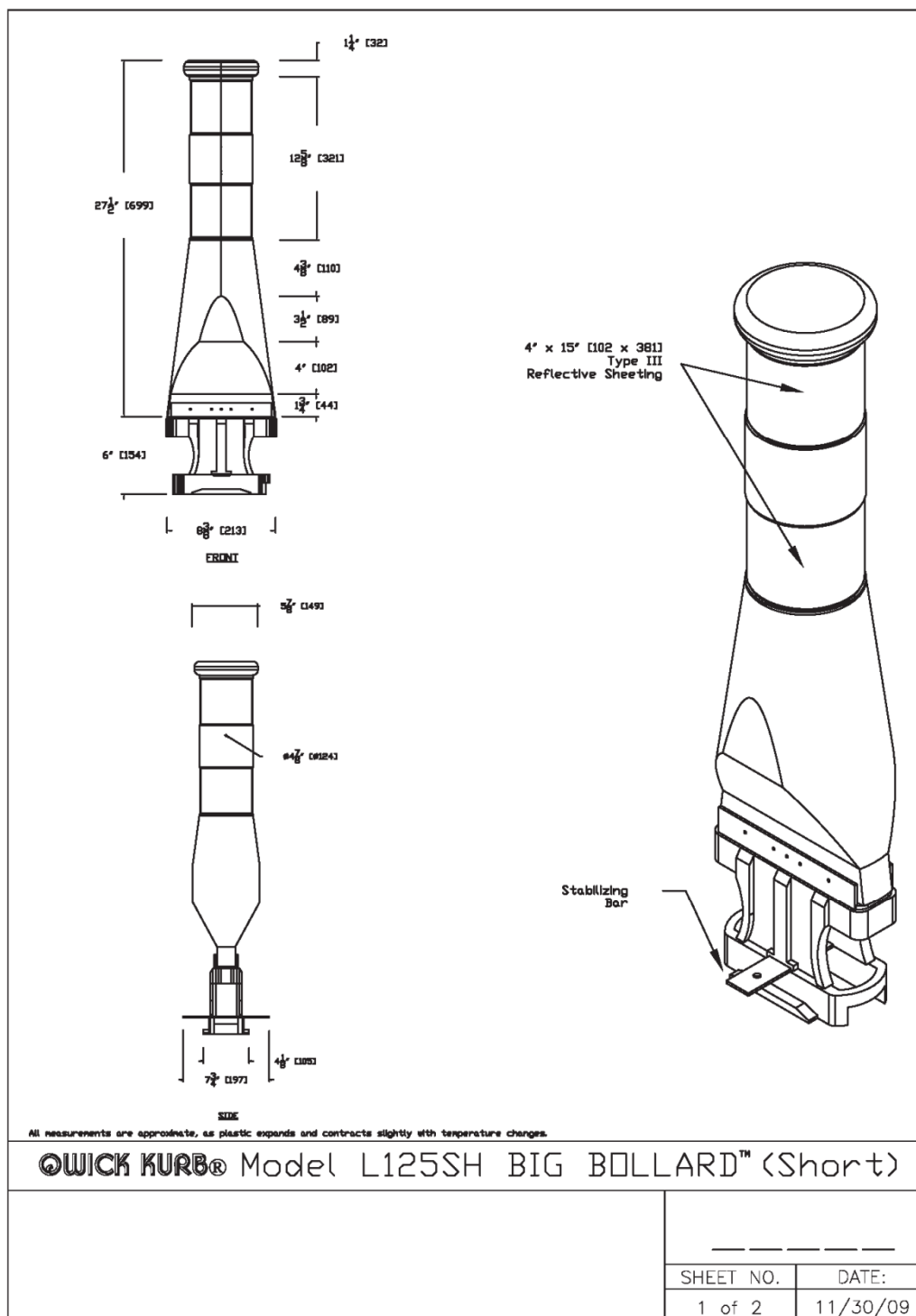
Stabilizing Bar

All measurements are approximate, as plastic expands and contracts slightly with temperature changes.

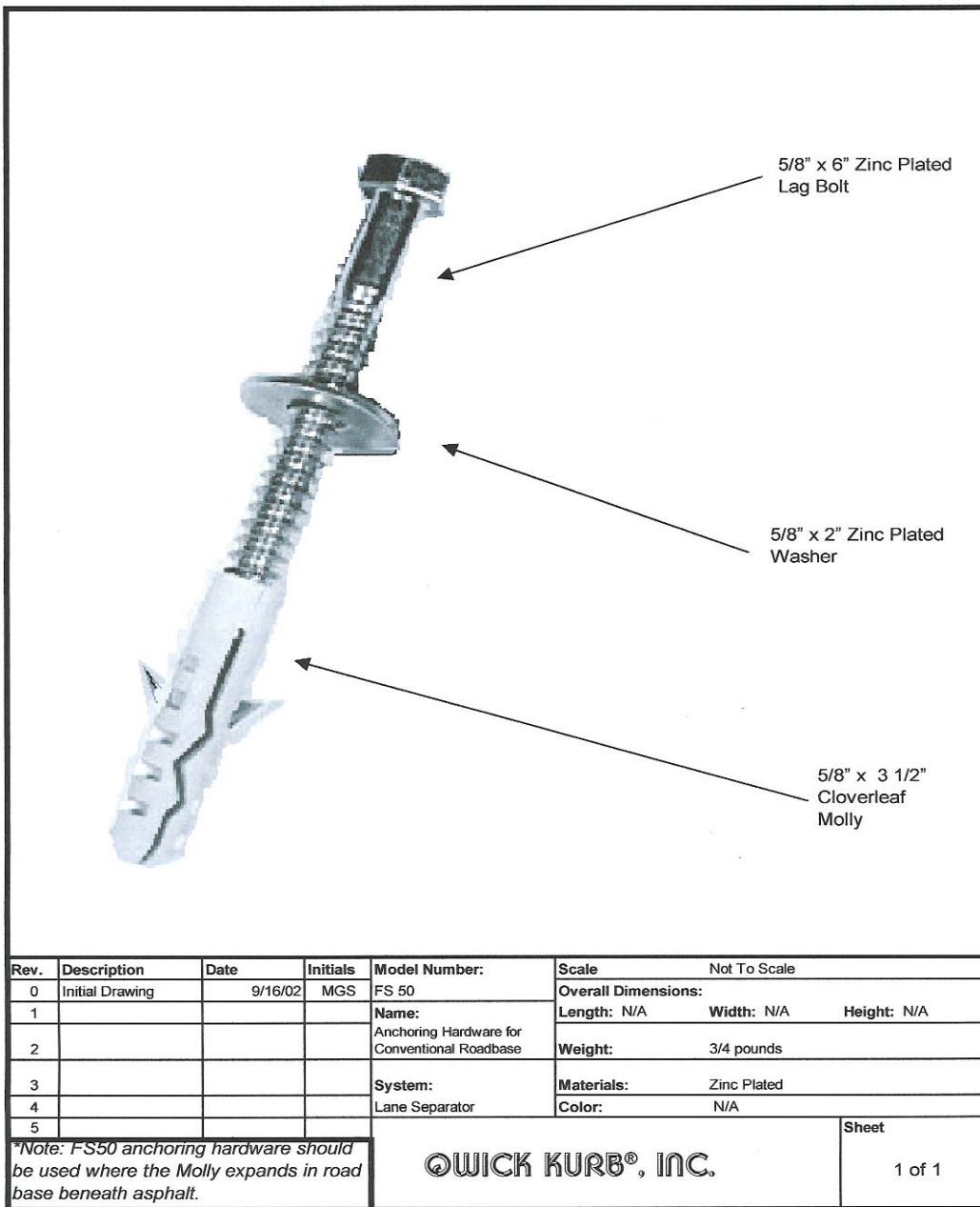
QWICK KURB® Model L125 BIG BOLLARD™

SHEET NO.	DATE:
1 of 2	10/05/09

L125SH SHORT BIG BOLLARD®



FS50 ASPHALT ANCHORING SET

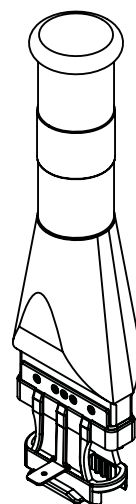
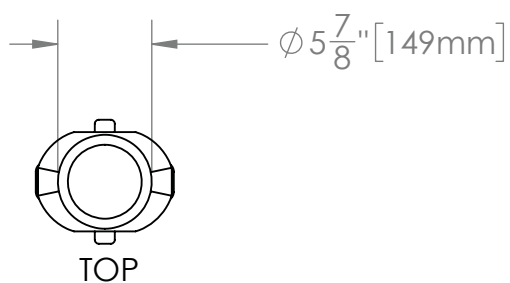


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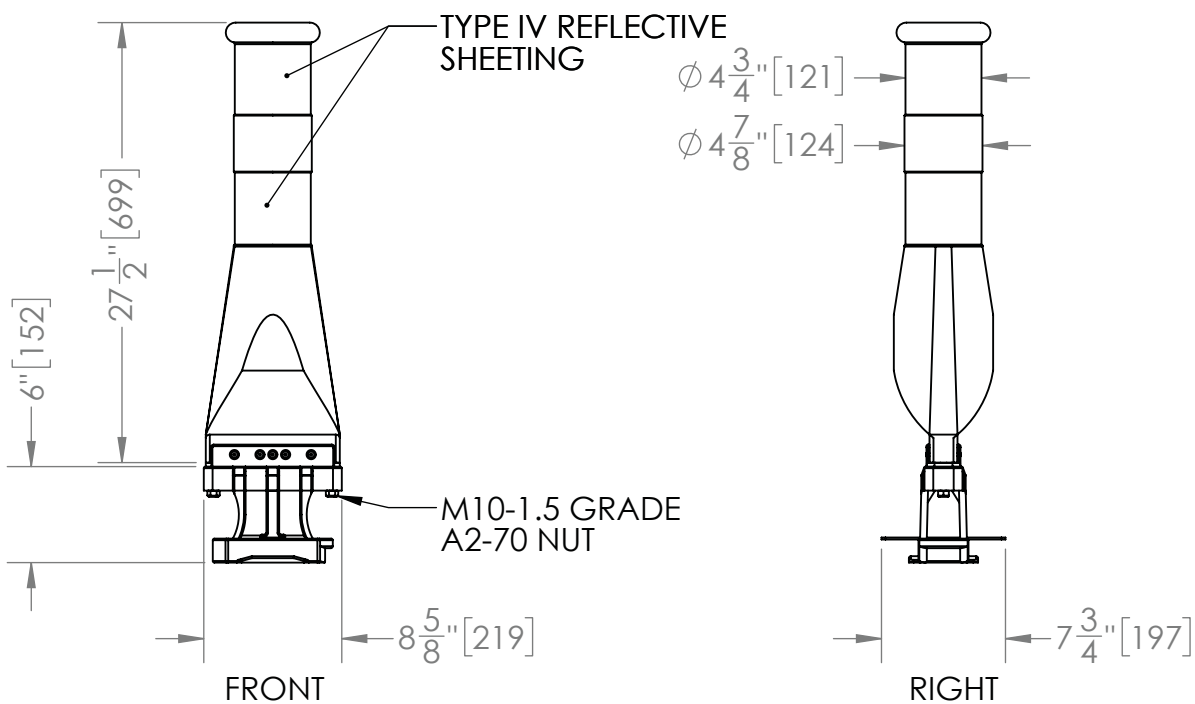
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OWICK KURB®. INC.

DRAWING

L125SH

SIZE
ASCALE:1:12
SHEET 1 OF 1

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