

**SECTION 02 90 00
SIDEWALK SHED**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Provide sidewalk sheds in accordance with New York City Building Code (Chapter 33, Section BC3307) and as per approved Site Safety Plan in Division I including all required lighting, grounding and wire mesh fencing. Include double high sheds (16 feet high by 12 feet wide minimum) at emergency vehicle access points (at sidewalk with vehicle access or roads) for fire trucks and other emergency vehicles entering and exiting the site. Coordinate access locations and shed width with FDNY and Development Management.
- B. File the application for sidewalk sheds which includes design drawings signed and sealed by a Licensed Professional Engineer retained by the Contractor with the New York City Department of Buildings.
- C. Where practical and based on the site conditions, the sidewalk shedding may be limited to 5ft / 20ft beyond the furthest area of work for buildings less than 100ft / greater than 100ft in height respectively. However, the contractors engineer shall file a CCD1 for any such case where the proposed sidewalk shed layout does not cover an entire building elevation. At the time that the sidewalk shed documents are filed; the CCD-1 shall also be filed with the Construction Safety Division of the Building Department (ccd1const-safety@buildings.nyc.gov <<mailto:ccd1const-safety@buildings.nyc.gov>>).
- D. Perform inspections of the sidewalk sheds as per Department of Building (DOB) requirements. Repair and replace damaged sidewalk shed components as required as part of an ongoing maintenance program.
- E. Record, maintain and submit maintenance logs with payment requisitions for all sites.
- F. After completion of the building envelope and roofing work and DOB sign-offs, remove the sheds as directed by NYCHA's Representative.

1.02 GENERAL PROVISIONS

- A. In case of discrepancies between contract specifications, drawings, and code requirements, the contractor shall base the bid on the most stringent standard.
- B. The quantities for different items of work specified in this Contract are part of the base bid and any increase or decrease in the specified quantities shall be adjusted by the unit prices specified in the Form of Proposal. The unit prices specified by the Contractor in the Form of Proposal may be subject to negotiation by the Construction Manager/NYCHA. The unit price stated in the FOP or agreed negotiated unit price shall be applicable throughout the Contract.
- C. The installation for various heights and widths of sidewalk shed shall be structurally capable to resist live loads as specified in the current NYC Building Code.
- D. Submit the shop drawings for the sidewalk shed layout and framing as well as design calculations for review by the Designer of Record (DOR) and NYCHA. The shop drawings shall be signed and sealed by a Professional Engineer licensed in NY State and hired by the Contractor. The shop drawings shall comply with the requirements of Chapter 33 of the NYC Building Code. The Contractor must receive written confirmation that the review by the Designer of Record and NYCHA has been completed prior to filing with DOB. The Contractor shall await approval of the drawings by DOB and shall forward a copy of the approved drawings to NYCHA before commencing shed installation. The contractor shall also provide an "EIU" (Electrical Inspection Unit) permit for shed lighting at the same time. When a submission is returned with comments by DOR and / or NYCHA's Representative, Contractor shall resubmit the submission incorporating comments. A Maximum of three reviews shall be performed by the DOR and / or NYCHA's Representative for any given submission. There will be \$250 charge to contractor for each review required after first three reviews.

- E. The Contractor and their PE are fully responsible for the accuracy and correctness of the shed's structural design and DOB permit. Comments and concerns raised by the DOR and/or NYCHA shall be considered and addressed. The contractor is fully responsible for any construction delays resulting from unresolved technical inadequacies of the sidewalk shed design.
- F. All sidewalk shed assembly and disassembly must be supervised and witnessed by a competent person with a minimum of 5 years of experience in the carpentry trade.
- G. The Contractor shall protect the buildings, landscaping, trees, shrubs, facilities, video cameras etc. from any damage due to the installation of the sidewalk sheds. Should any such items be damaged or disturbed or otherwise affected due to sidewalk shed installation, the Contractor shall report the damage and circumstances to NYCHA's representative and the Superintendent and shall make all necessary repairs and replacements to such damaged work at their own expense. New materials to match the existing work in every respect as approved by NYCHA's representative shall be used for repairs and or replacement.
- H. Signage:
 - 1. The contractor must post and maintain signage on each shed elevation as per DOB requirements.
 - 2. Where building entrance addresses are concealed by sidewalk sheds the Contractor shall install and maintain Building Address Signs immediately per NYC BC Sections 3301.9 & 3301.10.
- I. Siamese hose connections shall be marked by a metal sign reading, "Standpipe Siamese Connection" and by a red light over the sign.
- J. All electrical work must be carried out by a NYC Licensed Electrician.
- K. Each day the Contractor shall remove and legally dispose of all materials and debris resulting from their work during installation and removal. At the end of the day the worksite shall be left in a clean condition satisfactory to NYCHA.
- L. The Contractor must submit all required certificates (certificate from NYC DOB Electrical Inspection Unit (EIU), etc.) and request an EIU shed electrical inspection with first payment requisitions to the NYCHA.
- M. The Contractor shall be paid for installing, maintaining, and cleaning sheds for the specified period based on unit prices as indicated in the FOP. The unit prices shall be prorated for the duration of partial months.
- N. The Contractor shall be paid monthly rental for sheds after completion of the specified period as indicated in the FOP.
- O. Contractor shall be paid separately for dismantling and removal of sheds

1.03 NYCHA GENERAL REQUIREMENTS

- A. Sidewalk Sheds shall be inspected regularly. A daily maintenance log as required by DOB must be maintained onsite at all times (a sample checklist is attached at the end of this Section 02 90 00)
- B. The underside of Sidewalk Sheds shall be maintained lit at all times, either by natural or artificial lights. Minimum lighting shall be 4 foot candle or as required per DOB, whichever requirement is more stringent, at the walking surface. Light fixtures shall be vandal and tamper resistant.
- C. Any broken lights, missing cages or any other repairs to defective parts are to be addressed immediately, and included in the Unit Price bid for Sidewalk Shed.
- D. Have all loosened clamps shall be tightened as a regular maintenance item.
- E. All nuts and bolts shall be padded and taped up to a minimum height of six feet (6') above ground at all sheds to avoid injuries to pedestrians.
- F. Do not store work materials or debris on top of any part of the Sidewalk Shed.

- G. The contractor's Professional Engineer (PE) must confirm by letter that the sidewalk sheds have been installed as per Designer of Record and NYCHA reviewed shop drawings and design calculations. Sidewalk sheds that provide a base for pipe scaffolding shall be designed by a Professional Engineer (PE) hired by the contractor. The ground where the sheds are to be constructed shall be examined by the Contractor's Engineer to determine the capacity to support the cumulative load.
- H. Anytime a sidewalk shed has been damaged or displaced, the Site Safety Manager / Representative hired by the Contractor is to re-inspect and re-certify the repaired section(s). The Contractor shall supply documentation with photographs to NYCHA's Representative for review and record.
- I. The top of sheds should be broom swept each day to remove debris when the jobsite is active.
- J. The sidewalk shed shall not block or impede the use of any doors at occupied buildings.
- K. Provide protection to the public during installation and removal of the sidewalk sheds (barriers, flag persons, signs, caution tape, etc.).
- L. The space between sheds and building faces and any other side shall be closed (sealed) as required by NYCHA's Representative such that no pedestrian is able to gain access.
- M. Provide catchall protection only at locations shown on Design Drawings extending upward at an angle of 45 degrees from the edge of the deck and outward a horizontal distance of at least 5 feet beyond the ends of the shed. Such sloping end protection shall be constructed with substantial outriggers bearing on and securely attached to the deck to prevent displacement or distortion. Provide complete details for securing vertical, plywood parapet and catchalls in shop drawings. Parapet to extend 3'-6" minimum above sidewalk shed deck.
- N. When the top deck of the sidewalk shed is not installed against the face of the structure/building the side of the shed nearest the structure/building shall be sealed with full height fire retardant construction netting (net opening size 1/2" maximum and 1/4" minimum) as well as minimum 6 foot high, 11 gauge, 2"x2" chain link fence. Solid sliding or inward swinging gates may be provided as necessary to allow for proper execution of the work. Additionally, both sides of the sheds shall be sealed off with the same materials and in the similar manner within a distance of 30 feet of the building entrances.
- O. Any gaps between the parapet boards and sidewalk shed decks are to be sealed as to prevent materials from falling through the openings.
- P. At building entrance ramps, stoops, and at CCTV Camera locations, 10 foot to 16 foot high sidewalk sheds may be required. Shed drawings shall reflect these locations. Install additional sidewalk sheds at these locations as directed by NYCHA's Representative.
- Q. Sidewalk sheds at inclined surfaces and ramps shall be either installed leveled or stepped. Do not install Sidewalk sheds with sloped surface at these locations..

1.04 SPECIAL REQUIREMENTS

- A. Responsibility for Obtaining Permits:
 - 1. The Contractor will be responsible for securing all required Permits.
 - 2. Note: As a governmental agency, NYCHA is exempt from paying Governmental permit fees. The contractor should secure all necessary supporting documentation from NYCHA before filing permits.
- B. All hazardous conditions must be responded to immediately.
- C. When required, the Contractor must attend emergency meetings within two hours of notice at the job site with NYCHA's representatives.
- D. The Contractor must provide the telephone number of a responsible representative of their company to NYCHA who will be available 24 hours, 7 days a week.
- E. The NYCHA will initiate default proceedings if the Contractor fails to comply with any of these Special Requirements.

1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

1.06 SAFETY:

- A. The Contractor shall conduct their work in such a manner as to provide complete safety to their workers, NYCHA residents, the public and to provide access to buildings at all times.
- B. All sidewalks, ramps, stairs, means of egress and other areas of access must be kept unobstructed.
- C. Obstruction of Streets and Sidewalks: The requirements of the Department of Transportation shall apply with regard to the closing of streets or sidewalks, or to the obstruction of any part thereof.
 - 1. Directing Removal: The DOB commissioner is authorized to consider a failure to display a valid Department of Transportation permit for any street or sidewalk closure or obstruction as a violation of this section and shall direct removal of any such closure or obstruction.
 - 2. Exceptions: The failure to display a valid Department of Transportation (DOT) permit for closures or obstructions relating to the installation, adjustment, maintenance, repair, or removal of sidewalk sheds is not a violation of this section.
- D. Pedestrian Protection. Where a sidewalk shed is being installed, adjusted, maintained, repaired, or removed the area under such shed shall be temporarily closed during such work by means of barriers, cones, or caution tape, and flag persons shall be provided to direct pedestrian traffic.
- E. During erection, maintenance and dismantling of the sidewalk sheds the Contractor must provide alternate pedestrian access which might include obtaining a permit from the NYC DOT and temporarily re-routing pedestrians into a protected corridor of the street or closing the sidewalk entirely. A Flag Person / Safety Monitor shall be present to direct pedestrians to the temporary pedestrian route.

1.07 FILINGS WITH GOVERNMENTAL AGENCIES & PERMITS

- A. General:
 - 1. Shed filing and permits: The Contractor/ sub-contractors shall file for, obtain and maintain all governmental agency permits for sidewalk sheds and its lighting for the duration of which the sidewalk sheds are erected until the time they are dismantled. All Permits must be closed and evidence of their closure given to NYCHA representatives prior to final payment for work at each location. Such Permits include but are not limited to:
 - a. Sidewalk shed permits from the New York City Department of Buildings (DOB) and Department of Transportation (DOT) prior to installation of a sidewalk shed. A DOT sidewalk shed permit is not required if the shed is to be erected within a NYCHA property line.
 - b. The Licensed Electrician shall file the electrical/lighting work associated with the required provision of lighting under the sheds with the Electrical Inspection Unit of DOB ("EIU") upon completion of the Electrical installation and NYCHA's acceptance in order to obtain permits and sign-off.
 - c. NYCHA's Representative will provide a NYCHA Letter of Authorization for Installation of Sidewalk Sheds to the Contractor to file with the NYC Department of Buildings and if required with DOT to obtain all Permits.
- B. Permits and Shed Erection:
 - 1. No sidewalk shed shall be erected until all required permits have been issued, and copies given to NYCHA's representative.
- C. Maintaining Permits:
 - 1. The Department of Buildings will issue a permit for a period of one (1) year or until the expiration date of the Contractor's insurance if such time period is less than one year.

2. It shall be the Contractor(s) responsibility to renew all permits before the expiration date, as required, until the shed is removed. All necessary information for renewal of the permit shall be obtained from NYCHA.
 3. The Contractor shall pay any fine caused by their failure to renew the sidewalk shed and all other permits before they expire.
- D. Closing DOB and EIU Permits: Evidence of closing DOB and EIU permits must be submitted to NYCHA's Representative before final payment will be made for sidewalk sheds.

1.08 TIME FOR COMMENCEMENT AND COMPLETION OF INDIVIDUAL WORK AUTHORIZATIONS

- A. The Contractor shall begin authorized work at the development site after the location for the installation of the sheds is inspected and all field conditions are verified and approved by the Site Safety Manager / Representative hired by the Contractor and NYCHA's Representative. No work shall begin prior to issuance of all required permits. The Contractor is required to supply sufficient workforce to complete the work under each authorization in a timely manner
- B. The Contractor shall start duly authorized work within twenty four (24) hours of the authorization and continue on regular time until completed.

1.09 MAINTENANCE

- A. Every day, for the duration of the work at a specific site, as part of the contract maintenance requirements, the Contractor shall perform surveys and make all necessary repairs to the shed and lighting as required per DOB. The monthly payment requisition must be submitted along with a daily maintenance log along with pictures which have a date and time stamp to the NYCHA's Representative.
- B. The Contractor shall be responsible for maintenance of the sidewalk sheds and required lighting at all times including making necessary repairs due to high wind and accidents as part of their base bid (at no additional cost to NYCHA). If the sheds are not maintained as per contract requirements and the Contractor does not respond to notices by NYCHA's Representative in a timely manner, then NYCHA's Representative reserves the right to perform or have the repairs / replacements made by others and to back charge the Contractor. No payment will be made without reviewing the inspection reports provided by the Contractor for each month.
- C. The Contractor shall be responsible for all cleaning on top of all sheds for the removal of garbage and debris on a weekly basis when the job site is not active.
- D. To verify maintenance completion, the Contractor shall submit a maintenance schedule to NYCHA's Representative.
- E. Contractor shall make provisions in their cost for sidewalk shed extended maintenance to allow for DOB inspection and sign-off.

PART 2 PRODUCTS

2.01 SIDEWALK SHED

- A. All structural members, i.e., posts, primary and secondary beams, braces, etc. to be carbon steel.
- B. All timber products used in erecting the sidewalk sheds shall be in good condition and without holes or delamination.
- C. All corrugated metal deck must be in good condition. Do not use corroded, flatten and otherwise defective metal deck.
- D. Fasteners: All fasteners and connections used in the construction of sheds shall be used in such manner as to prevent unauthorized removal or loosening of any part of the shed.
- E. All Metal Parts shall be Electrically Grounded as well as the use of lighting grounding rods.

2.02 SUBMIT FOLLOWING ITEMS FOR REVIEW BY DESIGNER OF RECORD AND NYCHA

- A. Sidewalk shed drawings (layout, details, and calculations stamped and signed by Contractor's Licensed Engineer) including all fencing. The drawings must clearly show that entries through windows are prohibited.
- B. Sidewalk shed design, details, and calculations when pipe scaffold is provided on top of shed.
- C. Beam clamps

PART 3 EXECUTION

3.01 PREPARATION

- A. The Contractor shall have sufficient covers and guards to protect their work from rain, freezing, drying effects of sun and wind, traffic or other damaging causes. It is the Contractor's responsibility to protect and maintain their work at all time until final acceptance of the work by NYCHA.
- B. COORDINATION OF PLACEMENT OF SIDEWALK SHED & FENCING
 - 1. Prior to installation, meet at project site to review areas of shed and fencing placement and determine areas of potential interference and conflict.
 - 2. Coordinate and document temporary fencing layout for review by the Development's Superintendent and NYCHA's Representative (prior to installation).
 - 3. Sheds must be erected so as to not block required means of egress from the building. This includes having sufficient cut outs which allow lowering of fire escape drop ladders and permit access from those ladders down to the ground.
 - 4. Sheds must be erected so as to not obstruct any windows on any floor, street traffic, signage, CCTV camera, garbage and recycling receptacles, etc. Shed installation shall be adjusted based on field conditions.

3.02 SIDEWALK SHED CONSTRUCTION

- A. Sidewalk sheds shall be constructed in accordance with all applicable laws and regulations of the City of New York. Construction of sheds shall comply with Local Law 33/91 and Local Law 51. In case of discrepancy between NYCHA requirements and City & State code requirements, the Contractor shall follow the most stringent / HIGHER STANDARD required by NYCHA within the specification.
- B. All entrances and exits, as well as open spaces from the building line to a perpendicular distance of half the building height shall be protected and access restricted during any repair work on the vertical exterior envelope surfaces. Refer to drawings showing a diagram outlining the zones adjacent to buildings where walkways require protection by sheds
- C. Sidewalk Sheds shall have a clear interior width of 8 feet minimum and a minimum clear ceiling height of 8 feet unless shown otherwise on the contract drawings.
- D. The members of the sidewalk sheds shall be adequately braced and connected to prevent displacement or distortion of the framework. Steel framing shall be clamped at all connections between members (i.e. between post and beam, main beam and perimeter secondary beam at diagonally braced bays, etc.). Posts located on sidewalk surface shall be protected from vehicle impact. Where posts supporting the shed deck are placed beyond the curb, such posts shall be protected against vehicle impact. A special permit approved by DOT is required for such posts.
- E. Sloping end protections shall be securely attached to the deck, and shall extend at 45 degrees angle upward and outward for a horizontal distance of at least 5 feet.
- F. Regardless of whether extensions of sidewalk sheds are in front of the property or in front of adjacent properties they shall comply with the foregoing and be constructed so as not to unreasonably obstruct, either visually or physically; entrances, egress, driveways, and windows of adjacent properties as directed by NYCHA.
- G. All parapet and end protection plywood shall be painted with two coats high gloss exterior latex paint. The color of paint shall be as required per DOB.

- H. When bays are shorter than 8 feet, cross braces shall be installed at each bay with adjustable collar clamps.
- I. The Contractor shall be responsible to insure that the sidewalk sheds cannot be utilized for entry into the building through the windows.
- J. Do not block 1st and 2nd floor windows at any building. Do not block fire hydrants and cross walks.
- K. Some areas of sidewalk shed might require ½” wire mesh instead of plywood at the parapet wall to clear the CCTV view. The Contractor shall account for this condition at no extra cost to NYCHA.
- L. No bolts ends shall be left exposed at the pedestrian level. Bolt end shall be covered with rounded plastic nuts or padded and wrapped with duct tape to prevent injury.
- M. The bottom of all support columns shall firmly rest on plank and wood plates. The support columns shall not rest directly on dirt/lawn. Whenever more than one plank or wood plate is used they shall be securely connected with nails. See drawing for detail.
- N. All metal parts shall be electrically grounded

3.03 SIDEWALK SHED LIGHTING REQUIREMENTS

- A. The underside of the sidewalk shed shall be lighted at all times. The lighting fixtures shall be vandal/impact resistant, with a wire guard where applicable. Contractor shall provide manufacturer’s literature that demonstrates the vandal/impact resistance of the fixture.
- B. Contractor shall provide the minimum foot-candle (FC) described in this Section. NYCHA requires a consistent minimum lighting level of 4 FC on the walking surface and 4 FC shall be maintained for the duration of the shed lighting and as per local laws of the City of New York, No. 51 Section 3307.2.1 Paragraph 2. Minimum Lighting Levels for four (4) FC for shed configurations are described in the table below:
 - 1. Minimum Lighting Schedule
 - a. Shed Height | Spacing | Lamps | Lumens per lamp (min.)
 - b. 8ft. | 10 ft. | 42 CFL | 2700 each
 - c. 10ft. | 10 ft. | 2- 42 CFL | 2700 each
 - d. 12ft. | 10 ft. | 2- 42 CFL | 2700 each
 - e. 16ft. | 10 ft. | 2- 42 CFL | 2700 each
 - 2. For other configurations or ‘or equal’ consideration:
 - a. Submit lamp manufacturer’s literature and data
 - b. Literature shall demonstrate vandal/ impact resistance
 - c. Provide photometric report
 - d. Provide mock-up of 24 linear feet of shed lighting as required
 - e. Perform FC readings during night-time and demonstrate compliance to the minimum lighting, witnessed by NYCHA Representative as required
 - f. Meet NYCHA requirements as written in this Specification and Drawings.
 - g. Maximum light fixture elevation not to exceed 10’ when fixture is installed to underside of decking.
- C. Light fixtures shall be located ten (10) feet apart. For areas of 16 feet high shed, the lighting fixtures must be mounted on side pole of the sidewalk shed at a maximum of 12 feet height as per detail sketch on Contract Drawings. The maximum number of fixtures per circuit is twelve
 - 1. (12) with alternate circuits on consecutive fixtures in a line. GFCI type 15 amp circuit breakers shall be provided in an additional new panel board. All circuits shall be labeled at panel in the meter room or just outside of that room.
- D. Lighting fixtures and wiring shall be provided by the Contractor and shall be connected to the new panel installed. Electrical wire for lighting shall be pulled through rigid aluminum / galvanized vapor retardant conduit installed on the underside of the shed fastened a minimum of every 5 feet. Fixtures shall be mounted to flush to the underside of the decking. Provide expansion coupling where needed by structural conditions.

- E. Filing, Permits, Codes and other Requirements
1. File the lighting detail with the NYC DOB-Electrical Inspection Unit. The control number from the DOB-Electrical Inspection Unit will be required before a permit can be issued.
 2. All electrical work shall be done by the licensed electrician and shall comply with the New York City Electrical Code.
 3. The Contractor shall provide a schematic layout of the sidewalk shed lighting for review by DOR and NYCHA's Representative.
- F. Electrical Ground Wiring Policy for Sidewalk Sheds
1. Install 15 amp GFCI breakers for each lighting circuit [maximum 12 fixtures] at the source of power in an independent contractor panel box located in or just outside the Meter Room. A separate "ground wire" shall be pulled from the source of power through all conduits and bounded to each electrical box and fixture for the entire lighting circuit. At point of bonding, provide sufficient ground wire slack to allow for movement of the structure. Wiring of sidewalk sheds shall be considered "permanent" and installed according to all Code requirements:
 - a. Only $\frac{3}{4}$ inch minimum rigid aluminum or galvanized threaded conduit shall be used if above the ground.
 - b. Weatherproof boxes shall be used for all fixtures and junction boxes.
 - c. Three wire circuits that include separate ground wire shall be used.
 - d. Department of Building Electrical Inspection Unit filing, permits and sign-off (immediately after installation) shall be obtained by licensed electrician for each installation.
 - e. All metal parts shall be electrically grounded
 - f. All conduits to run under the shed ceiling directly to the building through the wall. Where this condition is not possible, conduit will be placed under ground (as per Code), NO GROUND SURFACED CONDUIT WILL BE PERMITTED.
- G. Lighting Maintenance
1. Inoperative lighting fixtures, bulbs, conduit wiring or circuits shall be replaced or repaired by the Contractor immediately.
 2. As per DOB requirements and / or this specification, the contractor must survey the operating condition of the lighting, make repairs or replacement of the system, including bulbs and submit a log of that survey and repairs / replacement to NYCHA.
 3. Compact Fluorescent Light Bulbs (CFL) and fluorescent bulbs shall be disposed of as hazardous waste in accordance with New York State Department of Environmental Conservation (NYSDEC), New York State Hazardous Waste regulations and the Universal Waste Rule. Contractor shall submit receipt of disposed bulbs as part of Construction Waste Management practices.
- H. Sidewalk sheds shall be grounded in accordance with the following:
1. All wiring shall be installed in accordance with the requirements of DOB - EIU, National Electrical Code (NEC) and NYC Building Code, latest version.
 2. Conduits shall be permanently grounded to the permanent building ground system. In addition to the permanent ground, a temporary grounding system is to be provided and consists of 10 feet copper rod electrodes driven in to ground with a resistance to ground not to exceed 25 ohms. Where the resistance is above 25 ohms, additional [10 feet copper] rod electrodes connected in parallel shall be used, but not less than one 10 foot rod for every 50 linear feet of shed. Where a stretch of sidewalk shed is less than 50 linear feet, provide at least one temporary grounding system. Conduct test under the presence of a NYCHA representative. Provide Test Report for NYCHA approval.
 3. The path from circuits, equipment, structures and conduit or enclosures to ground shall be permanent and continuous, have ample carrying capacity to conduct safely the currents liable to be imposed on it and have the impedance sufficiently low to limit the potential above ground and to result in the operation of the over-current devices in the circuit. All metal components shall be grounded.

4. Grounding circuits shall be checked to ensure that the circuit between the ground and the grounded power conductor has a resistance, which is low enough to permit sufficient current to flow to cause the fuse or circuit breaker to interrupt the current.
 5. Grounding wire bonding: provide sufficient slack where metal component is bonded to allow anticipated movement of the structure.
- I. Provide and maintain temporary lighting at all times, including making repairs due to vandalism. Temporary lighting wiring shall be run in rigid aluminum or galvanized conduit (RGC). The conduit shall be run exposed and secured, in an approved manner, below the shed. The Contractor shall provide branch circuit wiring from a panel in the building and run three THWN conductors (Black-White-Green) per circuit. Core drill (2 inches) the conduit entrance into the building and insert a 1½ inch threaded sleeve. The Contractor shall remove the LB conduit and wires and place a threaded cap on the sleeve through the building after temporary lighting is removed. The Contractor shall provide a schematic layout of sidewalk shed lighting. Provide expansion coupling where needed by structural conditions.
 - J. The Licensed Electrician responsible for initial installation and repair of the installation shall be on site to perform or directly oversee those installing and or repairing same temporary electrical service and shall provide a certificate of inspection from NYC DOB-Electrical Inspection Unit that the temporary service has been installed in accordance with all applicable codes and that it meets the following minimum requirements:
 1. All power to the electrical shed installation is ground fault interruption (GFCI) protected as per NYC Electrical Code 2011 amended Section 590.8.
 2. The installation is properly grounded and bonded as per NEC Article 250.
 3. All raceways are terminated and supported properly as per NEC Article 300.
 4. The installation does not pose a safety hazard to the public.
 5. The installation complies with Local Law No. 51.
 6. Where NYCHA requirements within this specification are more stringent they must be followed.

3.04 SIDEWALK SHED INSPECTION CHECKLIST

- A. Check and verify sidewalk shed daily based on DOB "Maintenance Log Requirements" and as per list below:

Sidewalk Shed Inspection Checklist

Development Name:		Contract #:			
Building # and address:		Time:			
Date of Maintenance Visit:		Permit #			
Contractor Name:					
	Item Description	Acceptable	Not Acceptable	Not Applicable	Remarks &/or Authorization for repairs
1.	Tops of sheds are broom clean and free of materials and debris				
2.	Electrical conduits are intact, secured and show no separation at joints.				
3.	Decking is free of gaps and open spaces.				
4.	No parapet panels are missing				
5.	Parapet or wire screens secured in place				
6.	Debris netting secured and intact				
7.	Chain Link Fence at the sheds are secured and intact				
8.	All bolts and nuts have been installed				
9.	All sharp edges and bolts within up to 6 feet high from the ground are padded or covered with rounded plastic nuts				
10.	All wood blocking under posts are secured with nails.				
11.	All sidewalk shed lights are fully functional and providing lighting levels as per project specifications.				
13.	No missing or damaged vandal proof light fixture cages				
14.	All horizontal and diagonal bracing is secured and straight				
15.	All structural members are sound, connected and secured.				
16.	Ground wire connections between copper grounding rods, sheds and jumpers are intact. Electrical Grounding is continuous.				
17.	Shed signs are installed as per DOB requirements				
18.	All pipe clamps are tight and secured				
19.	Building address signs are secured in place at all buildings				
20.	All GFCI breakers are working properly				
21.	Daily log of Sidewalk Shed inspections is maintained				
22.	All stand pipes, fire hydrants and Siamese connections are accessible				

Additional Remarks

 Contractor Rep. (Print & Sign) _____
 Date

 NYCHA Construction Project Manager _____
 Date

3.05 MAINTENANCE LOG REQUIREMENTS

Maintenance Log Requirements

Supported scaffolds and sidewalk sheds must be inspected daily and the results recorded in a maintenance log, readily available on-site at all times. The log must include, at a minimum, the following information:

General Information	Permit # _____
Name of Scaffold Erector _____	Installation Date _____ Expiration _____
Renters Name _____	Phone # _____
Shed type: Light ___ Med. ___ Heavy ___ Duty _____	Drawings on site for inspection? _____
Specific Information	Scaffold Height _____
Number of platforms decked _____	Are the base plates and mudsills secured? _____
Are the signs on the parapets? _____	Are the scaffold pins and bolts installed? _____
Maintenance Information	Are the legs and poles plumb, braced and not displaced? _____
Are cross braces fully attached, not bent, and not missing? _____	Are tie-ins correctly spaced, properly secured and the correct amount? _____
Are pipe clamps tight? _____	Are window jacks tight? _____
Are all the planks secured? _____	Are decking and planks in good condition? _____
Is deck fully planked? _____	Are there gaps or open spaces on decking? _____
Are the guardrails and toe boards secured at all places where required? _____	Is the netting extension of full length and height? _____
Is the netting secured? _____	Is the parapet the proper height and secured? _____
Are the lights working? _____	Is the deck clean and free of debris? _____
Name: _____	
Signature: _____	Date: _____

END OF SECTION 02 90 00