DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD)
DIVISION OF CODES AND STANDARDS

Mobilehome Park Utility Upgrade Program (CPUC Pilot Program)
T24 Code of Federal Regulations (T24 CFR)
T25 California Code of Regulations (T25 CCR)
T24 California Code of Regulations (T24 CCR)

The attached inspection and installation document has been developed for District Representatives, contractors, and interested parties to use as a guideline (it is not intended to be all-inclusive) when installing and inspecting utility upgrades as part of Mobilehome Park Utility Upgrade Program (CPUC Pilot Program) within California Mobilehome Parks. These upgrades are required to be installed in accordance with several sets of standards under different sets of laws and regulations (federal and state) as follows:

- Title 24 of the Code of Federal Regulations Part 3280: for alterations to the MH-unit.
  24CFR is available through the following link:
  www.hcd.ca.gov/codes/manufactured-housing/lawregs.html

- Title 25 of the California Code of Regulations Chapters 2 & 3 (as applicable)
  25CCR Chapter 2 is available through the following link:
  www.hcd.ca.gov/codes/mobilehome-special-occupancy-parks/mpregs.html
  25CCR Chapter 3 is available through the following link:
  www.hcd.ca.gov/codes/manufactured-housing/title25_hcd_manufacturedreg.html

- Title 24 of the California Code of Regulations Parts 3 (electrical) & 5 (plumbing)
  24CCR is available through the following link:
  www.bsc.ca.gov/codes.aspx

Permit Requirements
Mobilehome Park Utility Upgrade Program

- For beyond-the-meter lot construction, one HCD 50 permit is required for the entire Mobilehome Park. Permits shall indicate the number of lots and shall be accompanied by the appropriate fees.
  Example of fee calculation: A 50 space Mobilehome Park - $196.00 (Initial lot permit fee) added to $178.00 [for each additional lot with up to one (1) hour of inspection time per lot] multiplied by 49 lots totals $8,918. The permit may include other minor Mobilehome Park construction, including but not limited to: reconnecting a clubhouse, well pumps, minor street lighting, etc. Extensive work necessary for rewiring entire lighting systems and the removal of the above-ground portions of the legacy system will include an additional inspection fee of $196.00 (up to one hour) per inspection.
- For work conducted to the MH-unit, one HCD 415 permit shall include all homes in an individual Mobilehome Park. The permit shall be accompanied by the appropriate fees.
  Example of fee calculation: 50 lot Mobilehome Park multiplied by $196.00 [Inspection fee per unit with up to one (1) hour of inspection time per unit] totals $9,800.
- For a 50 space Mobilehome Park permit fees will total $18,718 (excluding additional park construction inspections as noted above).
- HCD is the **only** Authority Having Jurisdiction for alterations to MH-units.
- A single, separate permit for $196 is required by the park to verify the removal of the above-ground portions of the legacy system. This removal shall occur within 30 days of the completion of the utility upgrade.

CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF CODES AND STANDARDS

MOBILEHOME PARK UTILITY UPGRADE PROGRAM (CPUC PILOT PROGRAM)
GAS & ELECTRICAL INSTALLATION & INSPECTION

RV Lots in Mobilehome Parks

RV sections and RV lots within mobilehome parks are not included in this program. Should the owner choose to upgrade those systems, additional permit fees and inspections not associated with this program would apply.

If the park wishes to convert RV lots to MH lots, written approval from the local Planning Department and an amended Permit-to-Operate are required.

MH lots with RVs on them will have the lot utilities upgraded. Beyond-the-meter service will be extended to within reach of the RV connections being served by the gas and/or electric master-meter system existing at the time of the upgrade. However, the extensions will only be on, or in the ground and not attached to the RV. Only the extension will be tested, not the RV.

GAS SYSTEM INSTALLATION AND INSPECTION

NOTES:

- The utility company is responsible for the equipment up to the meter, not the Department of Housing and Community Development (Department) or any other local agency.
- Items that are not covered in the pilot program may require additional permits from the enforcement agency; i.e., rewire entire park lighting systems and removal of the above ground legacy system.
- Piping on the home, or when necessary on piers, to extend the gas system must be steel approved for natural gas use.

ACCEPTABLE MATERIALS WHEN TRENCHING IS NECESSARY:

Note: Trenching beyond the meter is discouraged and to be avoided unless absolutely necessary.

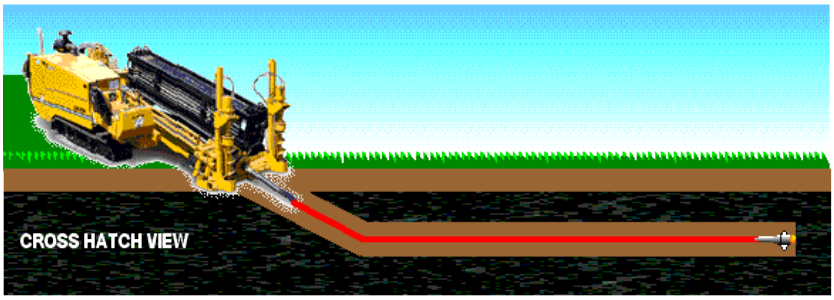
- Polyethylene (PE) pipe meeting the ASTM D2513-09a standards with an 18GA copper tracer line.
- Anodeless risers to transition from subsurface pipe.
- Other approved materials deemed acceptable by the Department

LINE SIZE:

- Aboveground use only - (Steel) one (1) inch or by design (Calculations may be required if less than 1”).
- Underground use only - (PE) one (1) inch or by deign (Calculations may be required is less than 1”)

LOCATION:

- Lot riser must be located outside the exterior wall within four (4) feet of the MH-unit.
- The Department will allow statewide Alternative Approval for the Mobilehome Park Utility Upgrade Program to allow PE to be installed underneath a driveway or a non-habitable accessory structure (trench or horizontal bore) without a gas-tight protective sleeve. The installation must meet all of the requirements of the Alternate Approval.
- The use of Corrugated Stainless Steel Tubing (CSST) may be installed on the home provided it is closely routed against the frame. It is not to be used in lieu of the approved flex connector.



- When it is necessary for the gas system piping to be underground, the riser shall be protected from vehicular damage in a manner approved by the enforcement agency.

BEYOND THE METER TRENCHING WHEN NECESSARY:

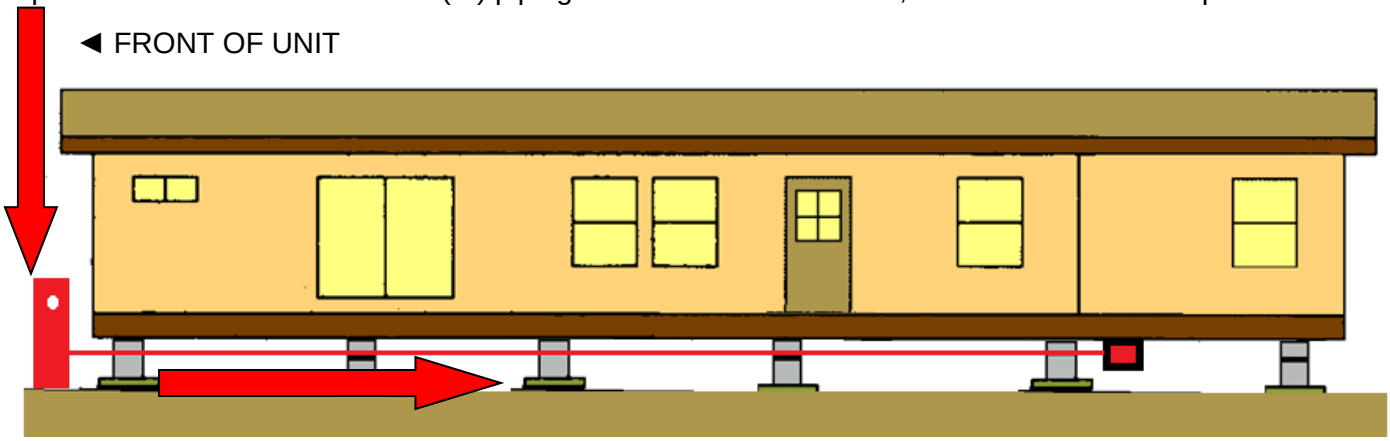
As noted above, trenching beyond the meter is discouraged and to be avoided unless necessary to make the extension.

- The minimum cover required for gas piping laterals underground is eighteen (18) inches in depth, unless otherwise noted.
- A minimum separation of twelve (12) inches horizontally and twelve (12) inches vertically must be maintained from other utilities.
- The trench bedding must consist of a minimum of three (3) inches of clean granulated soil or sand.
- Trench backfill must consist of six (6) inches of clean compacted granulated soil or sand over the piping before the trench is backfilled with native soil.
- Piping beyond the meter will be subject to the low pressure testing noted in #3 below.

INSPECTION:

Skirting must be removed sufficiently to be able to perform the inspection of the extensions on the home.

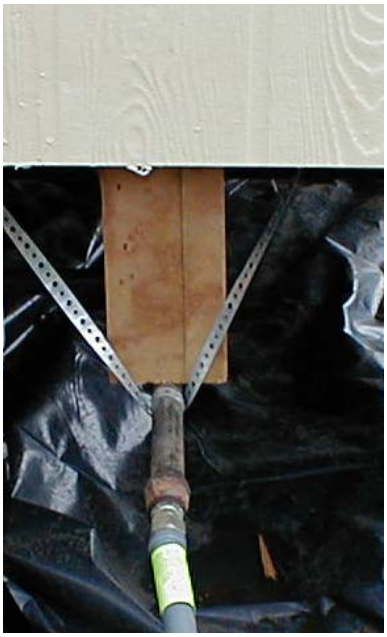
Gas line extensions on the MH-unit shall be one inch (1”) steel pipe or other appropriate design approved by the Department. If less than one inch (1”) piping is used for the extension, calculations will be required.



1. The gas piping system beyond the meter shall be subjected to a pressure test with all shut-off valves on the unit in the open position (excluding a range with pilot lights if applicable).
2. The test shall consist of air pressure (with a manometer, slope gauge, or gauge calibrated in either inches of water or psi) between ten (10) and fourteen (14) inches water column [six (6) ounces to a maximum eight (8) ounces] for not less than two (2) minutes without perceptible leakage. If necessary, testing may include a non-corrosive soapy water or bubble solution while pressure is remaining in the piping system.
   NOTE: The fuel-gas piping system shall not be over-pressurized. Pressurization beyond the maximum specified may result in damage to valves, regulators, appliances, etc.

3. All gas piping shall be adequately supported by galvanized or equivalently protected metal straps or hangers, structural members or other approved means at intervals of not more than four (4) feet. Plumber's tape is an acceptable support strapping. If it is necessary for the extension to be on piers, the piers will be located at four (4) foot intervals.

4. Solid iron pipe gas supply connection(s) shall be rigidly anchored to a structural member within six (6) inches of the supply connection(s).



5. Where the gas piping supported by the home crosses the centerline of the home, a flexible connector is not required at the centerline provided the piping is not rigidly mounted to the home.

6. Each unit connected to the gas riser outlet shall be connected by a listed flexible gas connector approved for use on an MH-unit.
7. After the installation, approval and cut-over of the park to the new system, the serving utility is responsible for the purging of the legacy gas system throughout the park.
8. After the gas system is purged, the park will obtain a single, separate permit to remove the above-ground portion of the legacy gas and electric systems.

ELECTRICAL SYSTEM INSPECTION & INSTALLATION

NOTES:

- The utility company is responsible for the equipment/conductors and their inspection up to the meter, not the enforcement agency.
- New conductors and pedestals will have a service load capable of 100 amperes. However, the MH-units will not be upgraded as part of this program. Future lot upgrades to the pedestal or MH-units will be at the park or homeowner's expense, respectively.
- Conductors shall be protected by overcurrent protective devices. A fuse or circuit breaker rating shall not be greater than the rated load of the MH-unit.

ACCEPTABLE MATERIALS:

- Conductors – Reference California Electrical Code for proper sizes for a given wire type.
- Sch. 80 PVC conduit, with appropriately sized conductors, may be installed on the MH-unit for the extension of the electrical conductors.
- If a supply cord is to be used for MH-units 50 amperes or less, the cord must be approved for MH use and cannot be less than 21 feet, nor greater than 36 ½ feet in total length.

SIZE:

- Conductor and conduit shall be sized appropriately for the application.
- Lot electrical service equipment will have a minimum 100 amp rating. However the overcurrent protection may be less, such as 50 amps, to match the rating of the MH-unit.

LOCATION:

- Lot service disconnects shall be located within four (4) feet of the exterior wall of the MH-unit.
- With a Department Alternate Approval (additional cost to be paid by the applicant) resident-owned parks consisting of subdivided, fee-simple lots (a deed for the actual land under the unit) may have electrical panels installed on the exterior wall of the MH-unit. These installations may incur additional costs by the park/resident for installation by the contractor.



- Lot service equipment shall have a clear working space not less than 30 inches wide and 36 inches deep and a clear height of 78 inches in front of any panel opening on the service equipment used for examination, servicing, adjustment, or maintenance.

- Self-supporting pedestals shall have a concrete encasement at its base of three and half inches (3 ½") thick and extend six (6") inches around the base of the pedestal.

- If the BTM extensions are above ground, the minimum radial clearances of the utilities are not required. However, subsurface installations shall maintain a minimum 12-inch separation.

- Equipment beyond-the-meter which is subject to vehicular damage shall be protected by means of a bollard or other methods approved by the enforcement agency. The required working clearance from electrical equipment must be observed.

- Lot service equipment shall be grounded by an approved grounding rod, per the Title 25 Mobilehome Park Regulations, and shall be installed outside the pedestal.
- Grounding conductors must be installed in an approved conduit or must be #4 copper.

WHEN TRENCHING IS NECESSARY BEYOND THE METER:

Note: As with the gas system, trenching or above ground electrical extensions not supported by the MH-unit are discouraged and should only occur when absolutely necessary to make the extension.

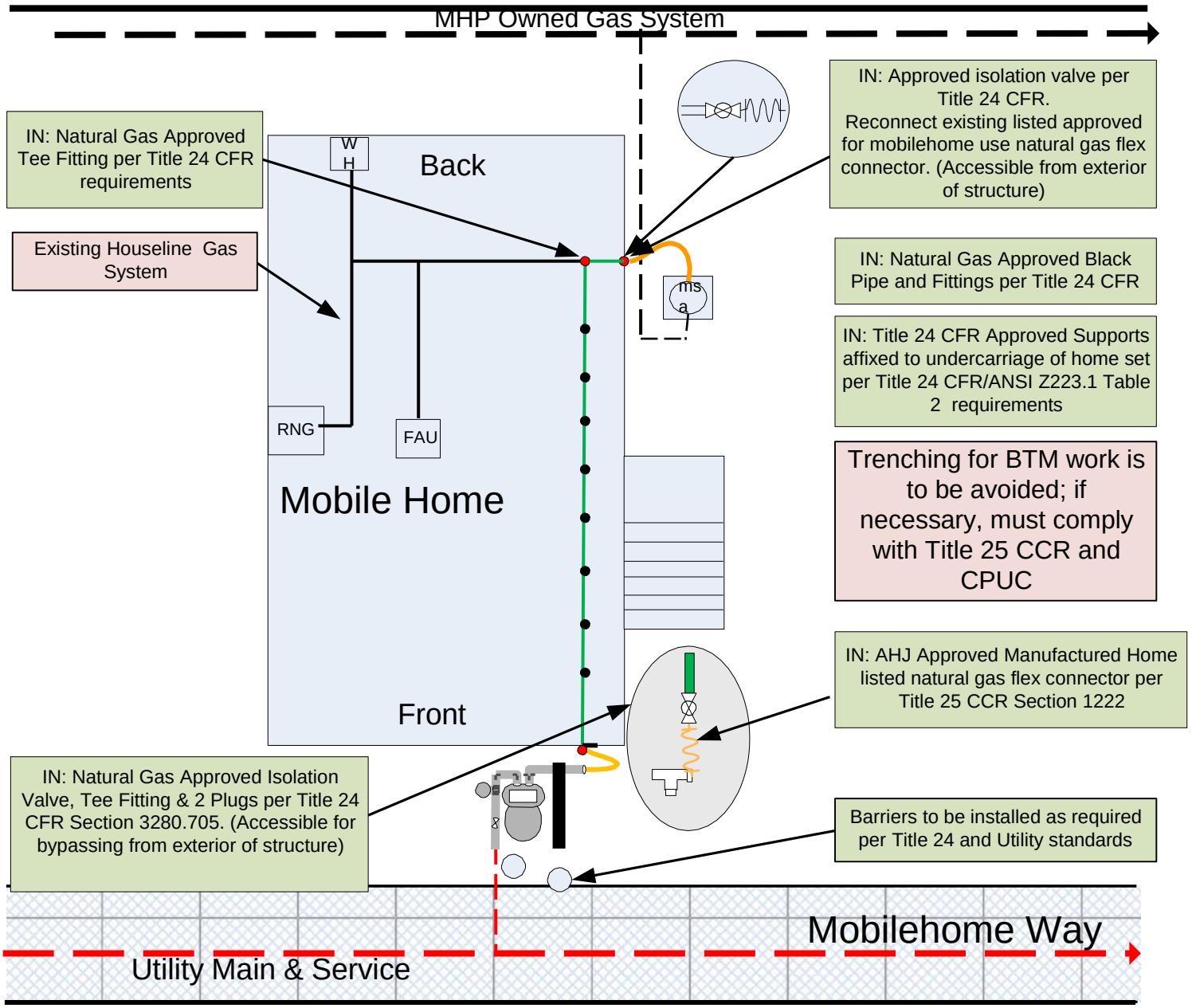
- The minimum cover over direct buried (type USE conductors and type UF cable) conductors shall be 24 inches.

- The minimum cover over non-metallic conduit shall be 18 inches.
- Electrical trench bedding shall be installed based upon type per CEC.
- Electrical trench backfill shall be installed based upon type per CEC.

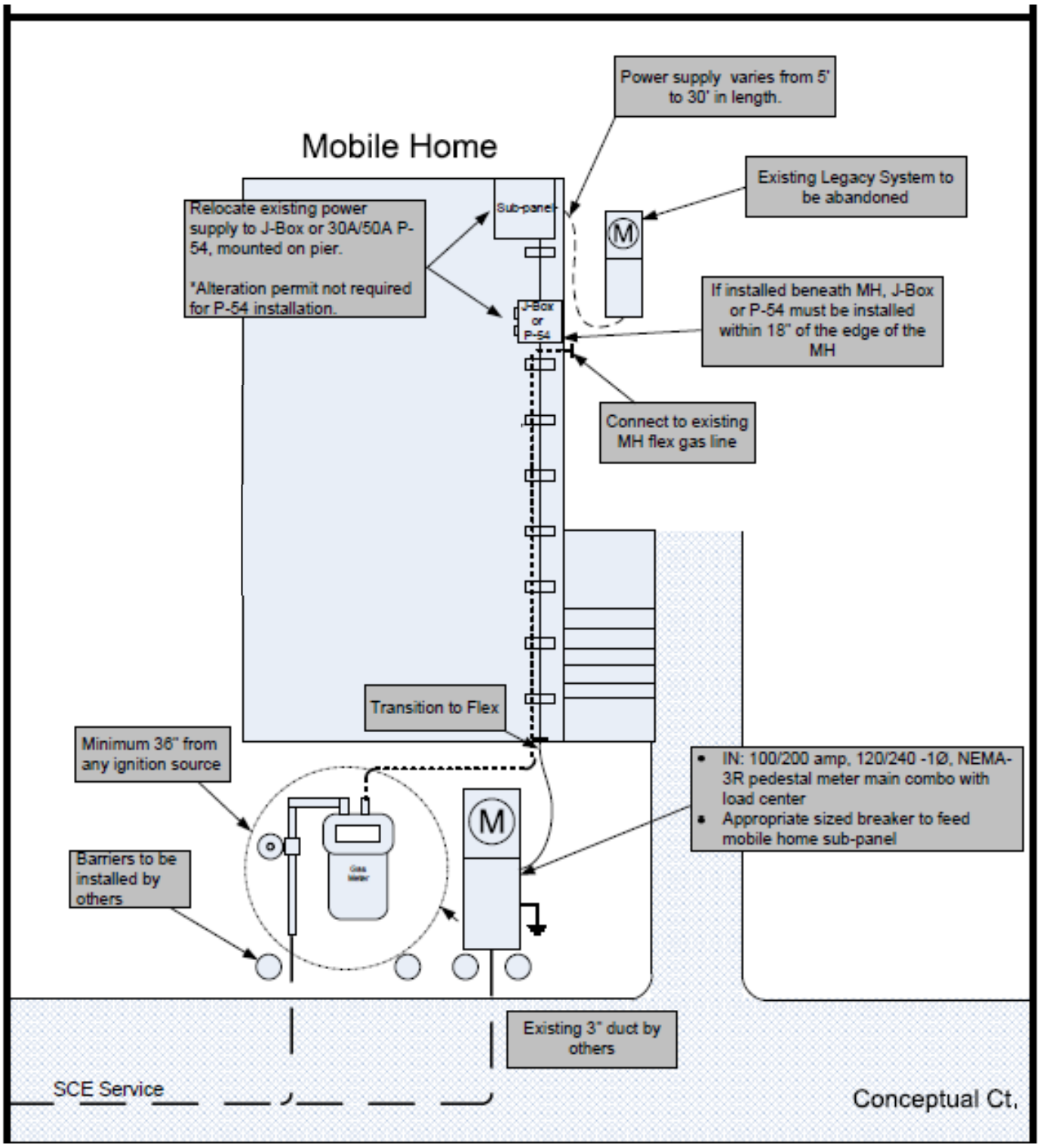
If the cable is in good condition, a P-54 box may be used with a receptacle under the unit to plug it in. The box can also be mounted on the underside of the unit to avoid extending the conduit on the ground.

MHP Utility Upgrade Program
Beyond the Meter – Gas – Scope of Work

- Contractor will be required to secure all necessary permits and licenses with the appropriate city, county or state agency having jurisdiction over the project and be in accordance with all applicable codes, standards, and regulations set forth in this scope of work.
- Contractor is responsible for all labor, material, excavation, and restoration.
- Contractor shall install per Title 24 Code of Federal Regulations (CFR) the appropriately sized natural gas approved black pipe and fittings affixed to the mobile home undercarriage using Title 24 CFR approved metal hangers a minimum of every 4' lateral feet of pipe. Non-combustible piers/block support is unapproved unless previously granted a waiver by the Authority Having Jurisdiction (AHJ) .
- At the requirement of the serving utility, the contractor shall install appropriately sized isolation valve on the outlet of hard piping accessible from exterior of structure.
- Reconnect existing gas line with a connector listed and approved for Mobilehome use to the existing legacy Meter Set Assembly (MSA).
- Contractor shall install a new appropriate sized tee, plugs, a gas flex connector approved for Manufactured Home use , and fittings to enable cut over to the Utility's meter discharge pipe (Run of the tee shall be connected to hard piping).
- Contractor shall pressure test existing home gas system and newly installed gas piping/fittings per Title 25 California Code of Regulations (CCR) requirements.
- Contractor shall restore gas service to existing legacy MSA and newly installed gas piping/fittings.
- After the inspection is completed by AHJ, Utility will install MSA and cut over without interrupting gas service to existing system. A positive approval must be received by the occupant to enter the home and safety check gas appliances.
- Contractor shall abandon existing legacy connections to the unit and cap or plug existing valve.
- Contractor shall comply with AHJ's conditions for abandonment of existing privately owned gas distribution system.



Updated 9/2/2015


Mobile Home
Power supply varies from 5' to 30' in length.
Existing Legacy System to be abandoned
Relocate existing power supply to J-Box or 30A/50A P-54, mounted on pier.
*Alteration permit not required for P-54 installation.
Sub-panel
M
J-Box or P-54
If installed beneath MH, J-Box or P-54 must be installed within 18" of the edge of the MH
Connect to existing MH flex gas line
Transition to Flex
Minimum 36" from any ignition source
IN: 100/200 amp, 120/240 -1Ø, NEMA-3R pedestal meter main combo with load center
Appropriate sized breaker to feed mobile home sub-panel
Barriers to be installed by others
M
Existing 3" duct by others
SCE Service
Conceptual Ct.

INSPECTION:

1. When a supply cable is used, a listed clamp or the equivalent shall be provided at the distribution panel board knockout to afford strain relief for the cord to prevent strain from being transmitted to the terminals. A strain relief is also required if the supply cable is spliced in a junction box.

2. The connection of the feeder assembly conduit to the lot service equipment shall be made using flexible conduit at least 36 inches in length.

3. The feeder assembly shall be installed above ground to be kept from direct contact with the earth.
4. The electrical wiring and power supply feeder assembly of the MH electrical service shall be tested for continuity and grounding. The test shall be made by connecting one lead of the test instrument to the grounding conductor, and applying the other lead to each of the supply conductors, including the neutral conductor. There shall be no evidence of any connection between any of the supply conductors and the grounding conductor.
5. Noncurrent-carrying metal parts of electrical equipment shall be tested to determine continuity between such equipment and the equipment grounding conductor.
6. A single disconnecting switch or circuit breaker shall be provided in the lot service equipment for disconnecting the power supply to the unit. The disconnecting switch, circuit breaker or its individual enclosure shall be clearly marked to identify the lot serviced and shall not exceed the rated load of the MH-unit or its conductors.

7. System grounding conductors and equipment grounding conductors shall be connected as required by the California Electrical Code, Article 250. The connection of a grounding conductor to a grounding electrode shall be exposed and readily accessible.
8. All electrical equipment located in either damp or wet locations or outside of a unit shall be constructed of, or installed in, equipment approved for damp or wet locations.
9. Aluminum wiring terminations must have an oxide inhibitor.
10. Lugs shall be torqued to the service panel manufactures specifications.
11. Only one power supply connection shall be made to an MH-unit.

TESTING CERTIFICATION

Upon approval of the installation and satisfactory completion of the gas and/or electrical tests, the lot equipment shall be approved for service connection. When approved, a Department approval sticker shall be affixed to the tested equipment in a visible location.

(Actual Size)

CONTACT INFORMATION

Brad Harward

Bradley.Harward@hcd.ca.gov

(916) 263-3336

CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF CODES AND STANDARDS

MOBILEHOME PARK UTILITY UPGRADE PROGRAM
GAS & ELECTRICAL INSPECTION

PARK ID#: _____ PARK NAME: _____ LOT #: _____

GAS SYSTEM INSPECTION

Violation	
	Acceptable materials are being used and plastic pipe/components comply with ASTM D2513-09a (25CCR §1208)
	Materials are the proper size and type for the application (25CCR §1232)
	Material are installed in an acceptable location (25CCR §1216)
	Extensions are installed in an approved trench or horizontal bore with tracer wire (when applicable) (25CCR §1216)
	Extensions are installed with the proper support and hangers (when applicable) (24CFR §3280.705)
	Gas system has successfully undergone a low pressure test (25CCR §1362)
	The service equipment is protected from vehicle damage (25CCR §1228)
	Supporting documentation has been provided. (when applicable) (25CCR §1200)
	MISC:

ELECTRICAL SYSTEM INSPECTION

Violation	
	Acceptable materials are being used (25CCR §1136)
	Materials are the proper size and type for the application (25CCR §§1136, 1140)
	Material are installed in an acceptable location (25CCR §§1183, 1184)
	Extensions are installed in an approved trench or horizontal bore (if applicable) (25CCR §1134)
	Subsurface extensions are installed with the required minimum radial clearance
	Extensions are installed with the proper support and hangers (when applicable) (24CFR §3280.808)
	Electrical equipment has successfully undergone a continuity/polarity test (25CCR §1362)
	Equipment is installed per the manufacturer's installation instruction and HCD regulations with proper support (25CCR §1185)
	The service equipment is protected from vehicle damage (25CCR §1178)
	Supporting documentation has been provided (if applicable) (25CCR §1130)
	MISC: