Utility Development

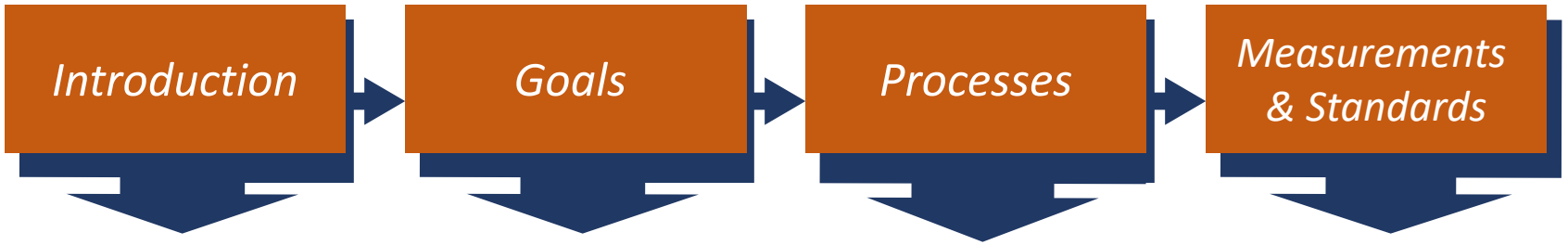
Utility Development Process

Guidebook

NV Energy
Energy Delivery Operations

Revised January 2021

Agenda



- Introduction
- Purpose

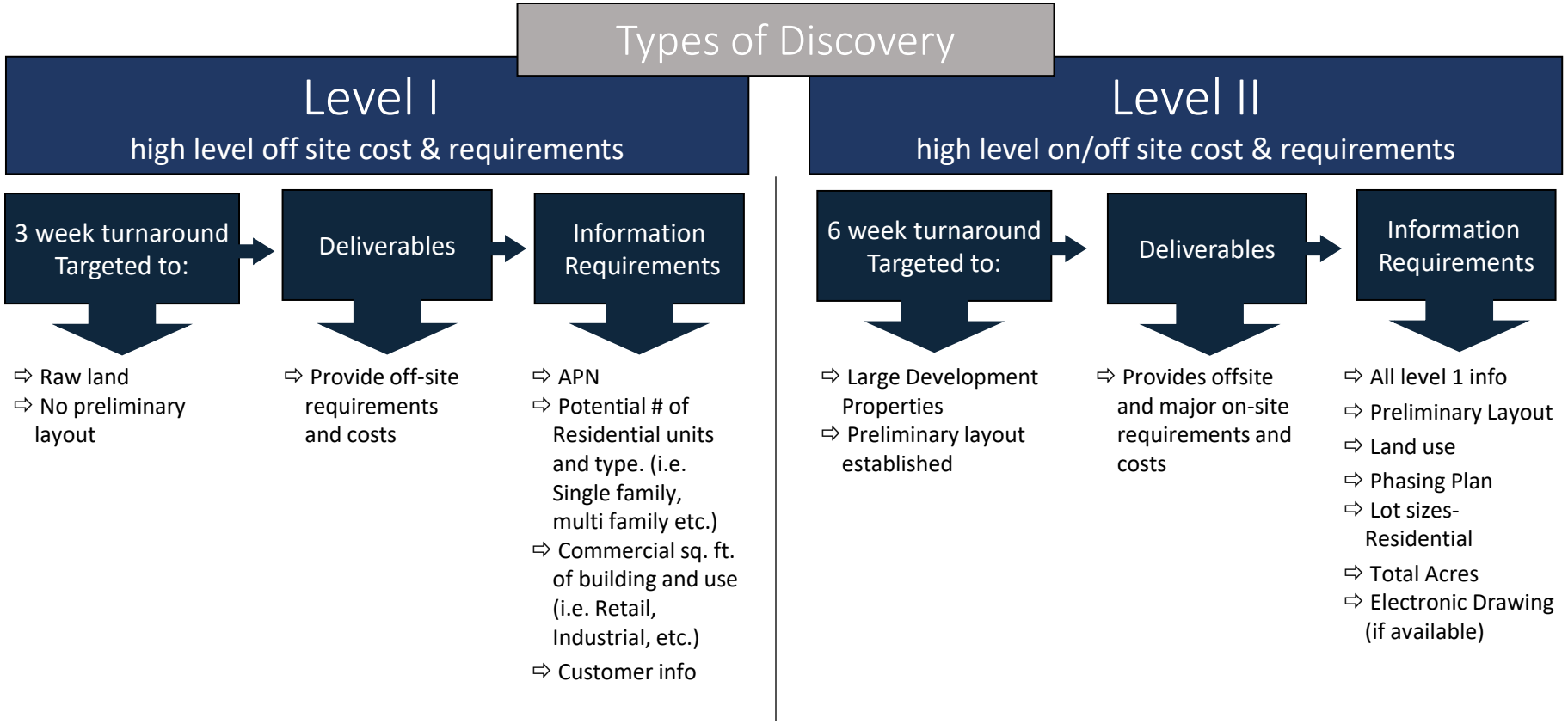
- Review Utility Process

- Discovery
- Design
- Inspection
- Construction
- Meter Set

- Customer Satisfaction

Discovery Process (Not Real Projects)

Discovery Defined: Utility master planning including infrastructure, off-site requirements, cost estimates, project scheduling and commitments. The product is customized to the project and includes electric & gas.



Rule 9 Standard Projects

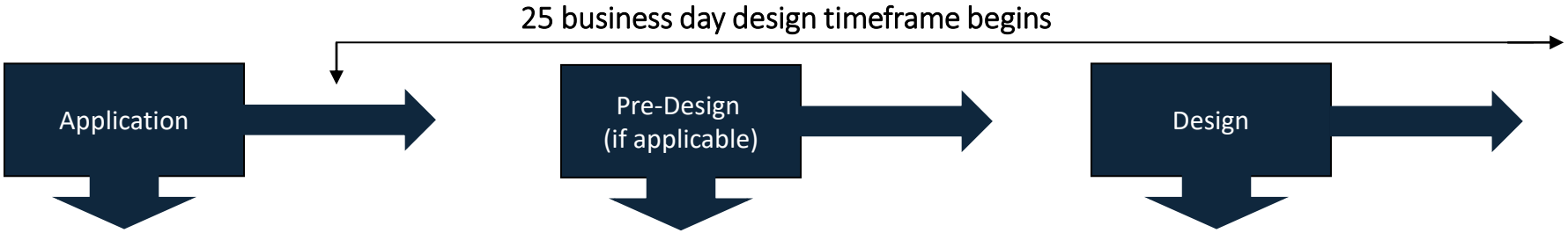
- Electric Rule 9 was modified 8/2013 and timeframes are applied to Standard Projects. Gas Rule 9 not modified, but timeframes are followed where possible.
- Standard projects are defined as generally a line extension that is smaller than a Large Project (over $400,000 or 1 MW) and is distinct from Abnormal Risk, Large, Master Planned Communities, relocation and removal, substation and high voltage distribution projects and does not contain a distribution feeder:
  - Distribution feeder: 3-1/0 underground primary in excess of 500', 3-1000 MCM at any length and 3 phase overhead primary conductor at any length.

- Completed New Business applications can be submitted at the following offices
  - Truckee Meadows – 1 Ohm, Reno
  - Carson City – 875 E. Long St, Carson City
  - Fallon – 346 N. Main Street, Fallon
  - Winnemucca – 500 West McArthur, Winnemucca
  - Elko – 4216 Ruby Vista Drive, Elko

District Offices

Design Process – Standard Projects

Design Process Defined: The specific onsite utility design of Electric & Gas facilities, including the financial contract, and pre-construction meeting.



⇨ Applicant completes Project Information Sheet (including temporary service requirements) and delivers it to an NV Energy (NVE) representative.

⇨ NVE Rep will determine if all the information is complete and within 15 days from determining application is complete, Applicant will be mailed a Design Initiation Agreement (DIA).

⇨ Within 3 business days from NVE receiving signed DIA and advance, Applicant will be notified the identity of the Project Coordinator.

⇨ For more complex projects, cluster home projects, phasing requirements or at the Applicant's request, a pre-design meeting should be held.

⇨ Commercial or residential electric panel specifications are required on 400 amp and above and must be submitted to NVE for approval. Contact Electric Metering Department at 834-7288.

⇨ Non-preferred panel locations require NVE's written approval.

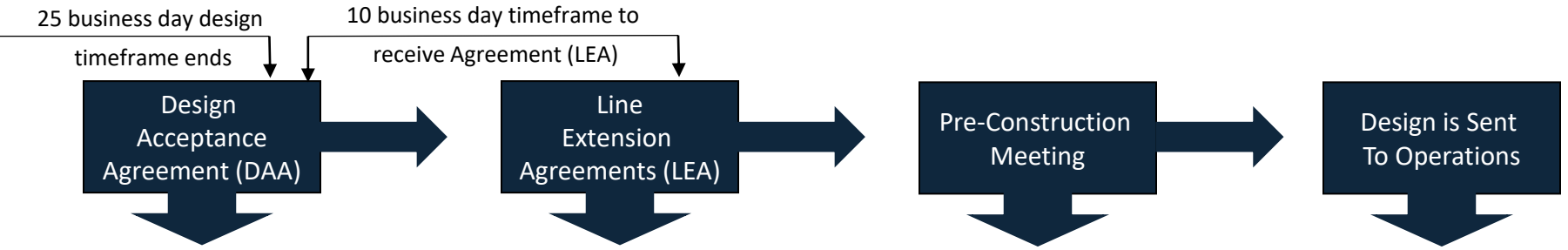
⇨ Large gas meter installs or high pressure questions call 834-7615.

⇨ The Designer field checks the project site and prepares initial utility design drawings for Electric and/or Gas facilities.

⇨ Applicant may request a field meet with the Designer to review all installation options and phasing requirements.

⇨Applicant and Designer coordinate temporary service requirements.

Design Process – Standard Projects



- ⇨ Designer verifies and/or meets with Applicant to review design drawing.
- ⇨ Final design drawing and a DAA are presented to the Applicant for signature.
- ⇨ The final design is used to develop the cost estimate and the agreements.
- ⇨ Note: Design changes after DAA acceptance are a non-refundable cost to applicant.
- ⇨ Design drawings are sent to the phone and cable companies.

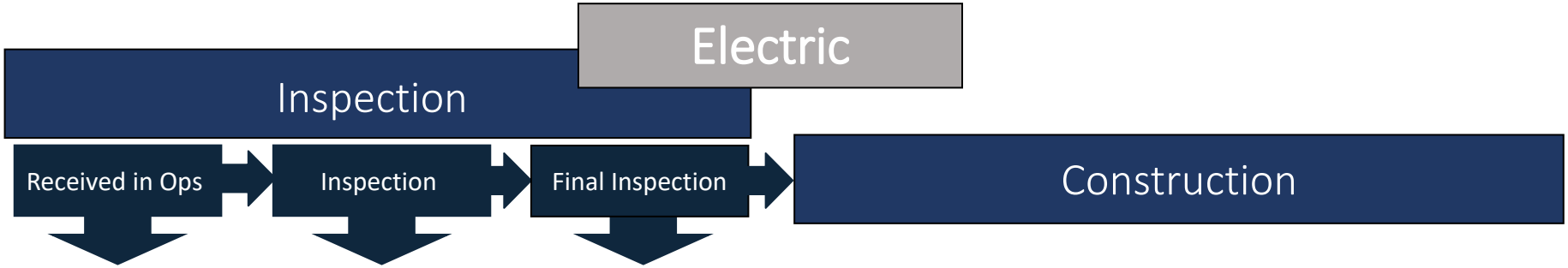
- ⇨ Easement documents are prepared for third party and outside agency (i.e., State, NDOT, Railroad, Federal, etc.)
- ⇨ Within 10 business days after NVE receives required easements or Lands determines a partial release is appropriate, Designer prepares the Line Extension Agreement (LEA) with final costs.
- ⇨ Third party easements are the Applicant's responsibility and may be included with the LEA for Applicant to obtain the signatures.
- ⇨ Applicant signs LEA and returns it to NVE with any payment and easement documents.
- ⇨ ***Projects will be held and not released to construction until all outside agency permits, easements or 3rd party easements are acquired.***

- ⇨ After LEA, payment and easements are returned to NVE, the Applicant is responsible for calling their Designer to schedule a pre-construction meeting.
- ⇨ Phone and cable require 5 business days to prepare for a pre-construction meeting.
- ⇨ NVE will schedule the preconstruction meeting 5 business days from request for preconstruction meeting.
- ⇨ If possible the foreman for the Applicant's excavation contractor should attend to understand potential conflicts.
- ⇨ All addresses should be provided or confirmed at the pre-construction meeting.
- ⇨ Phasing requirements to be discussed.
- ⇨ Small projects may not require pre-construction meeting.

- ⇨ Work order is sent to Electric and/or Gas Operations.
- ⇨ Underground project is filed with inspection pending a call from the contractor.
- ⇨ The overhead project is filed in Electric Operations and waits for the customer to call NVE for an overhead panel inspection so the entire job can be done in one trip.

Inspection Process

Inspection Defined: Inspection of substructure installation for electric facilities.



- ⇨ Call Inspector Line in Reno 834-7520 & give Project ID (PID) & contact information.
- ⇨ Advance notice of 2 working days required to initiate initial inspection process.
- ⇨ Inspection requests are scheduled and internally dispatched to Inspector.
- ⇨ Contractor must have knowledge of Vol. 17 standards (required).
- ⇨ Punch List available to Contractor at start of job.

- ⇨ 24 hour advance notice required per inspection.
- ⇨ Contractor to provide Project ID (PID), name, phone number and inspection location(s) “from _____ to _____”.
- ⇨ Installation of substructure, conduit, sand, and warning tape are inspected.
- ⇨ Final grade, curbing, boxes, switch gear and pad installation finished prior to mandrel request.
- ⇨ Contractor to call for mandrel appointment.

- ⇨ Contractor to call for Final Inspection.
- ⇨ Punch List Complete
- ⇨ Inspection and sign off by Inspector.

Volume 17 - https://www.nvenergy.com/business/newconstruction/newconstructionN/standards/electric_standards/vol_17.

Inspection Process

Electric

Primary Substructure Inspections

Inspections must be called in before 3:30 pm for next day inspection (excludes weekend so Friday for Monday)

Primary Conduit Process

FIELD MEET:
When your job is ready to start and you feel your job is complicated. If you request that you want to meet with the Inspector to go over the job prior to digging, we are happy to do so with a Field Meet.

PRIMARY CONDUIT, SAND & TAPE:
When you're primary trench is open and your conduit is installed, you will call in for a primary conduit sand and tape. **You will need to specify where your digging from and where your digging to, Please use identifiers on map such as vaults, transformers etc.**
This process may take many inspections. When the entire job or phase is complete and before your ready to Mandrel. You will need to complete your "punch list" that was give to you at your PRECON, **this is a list of everything that must be completed prior to calling in for a Mandrel.**
Permanent grade will be established (sidewalk, curb and gutter) boxes, bollards if necessary, switch gear and transformer pad installations must be finished.

Mandrel Process

MANDREL INSPECTION:
Depending on work load these inspections are generally done in the afternoon, as they plan their day accordingly with their other inspections.
When calling in a Mandrel please specify if your Mandrel is the entire project, or if you have previously paid for phasing in the design phase please specify which phase you will be doing. Contractor must supply a Mandrel, a copy of the map, and enough manpower to complete the Mandrel process.

NOTE: This process when released by inspector, auto-populates the materials (transformers, streetlights, etc. to be reserved for construction.

When the Inspector releases the job it gets passed on to Construction where it is assigned to a crew 7-10 business days after inspection is complete.
(During heavy construction season this could run out to 15 days to start construction).

Inspection Process

Electric

Residential Service Inspections

Inspections must be called in before 3:30 pm for next day inspection (excludes weekend so Friday for Monday)

Service Trench Conduit Process

FIELD MEET:
When your job is ready to start, specify the address when calling in for inspection. When applicable, if you request that you want to meet with the Inspector to go over the job prior to digging, we are happy to do so with a Field Meet.

SERVICE CONDUIT, SAND & TAPE:
When your service trench is open you will call in for a service conduit, sand and tape. Specify the service address, including building number for multi-meter panels, when calling in.
Provided the service trench and panels meet Volume 17 Standards, this process is usually pretty quick and can easily run smooth. Conduit inspections are done in the AM, and depending on work load, the Inspector may return for the sand and tape inspection in the PM.
Prior to Final Inspection, you must have final grade at panel, mule tape in conduit, address at house or metal tag for unit numbers at apartments, and panel needs to be firmly attached.

Final Inspection Process/ Meter Release

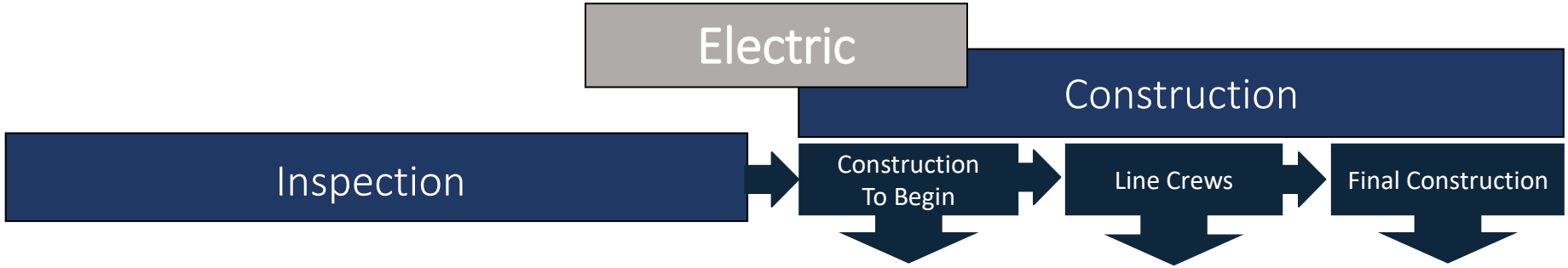
FINAL SERVICE INSPECTION:
Depending on work load these inspections are generally done in the afternoon, as they plan their day accordingly with their other inspections.

NOTE: This process when released by inspector, auto-populates a meter set **ONLY IF city/county Ok's are in. (This is customers responsibility to call the city or county)**

Generally a meter set takes 48 hours. Wire size determines if a line crew is required. If so, they are scheduled 7-10 business days after inspection is complete. (During heavy construction season this could run out to 15 days to start). If Trouble Operations is installing the service, please call 775-834-7532 if you have not gotten a meter set within 48 hours.

Construction Process

Construction Defined: Physical installation of facilities for electric.



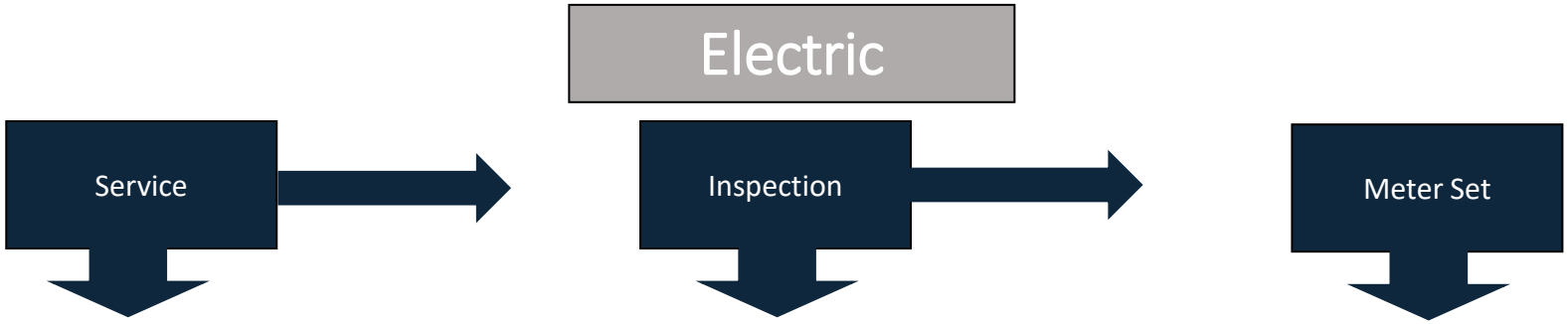
- ⇨ Project given to New Business Construction for scheduling construction crew.
- ⇨ Materials ordered and staged (48hrs required for this process).

- ⇨ Assigned to crew 7-10 business days after inspection is complete. (During heavy construction season this could run to 15 days to start construction).
- ⇨ Crew to load and transport materials to job site.
- ⇨ Construction begins.
- ⇨ ***The overhead project is filed in Electric Operations and waits for the customer to call NVE for an overhead panel inspection so the entire job can be done in one trip.***

- ⇨ Work order is complete, and the project is ready for the service installation and meter set.

Electric Meter Set Process

Meter Set Defined: Physical connection of utility facilities from transformer or box to panel on home/building. This process also includes the installation of Electric meters.



- ⇨ Application for electric service is created from the Line Extension Agreement (LEA).
- ⇨ Project addresses that were not provided or that have changed, must be given to NVE ASAP to prevent delay in meter set.
- ⇨ Instrument-rated electric meters, require a panel submittal to NVE and an approval by NVE prior to purchasing the equipment.

Panel submittals for 400Amp or greater should have been received/approved at this point.

- ⇨ Call Inspector Hot Line 775-834-7520 to initiate electric service trench inspection 24 hours in advance.
- ⇨ Inspection to occur within 24 hours.
- ⇨ Conduit, sand & warning tape inspection
- ⇨ Panel inspection must have trench backfilled, posted address, mule tape string in conduit.
- ⇨ Overhead service - panel check only

- ⇨ City/County OK and NVE final inspection required for all meter sets.
- ⇨ Service address must be visible from the street.
- ⇨ Instrument rated electric meters will be set within five business days after City/County OK and NVE final inspection.
- ⇨ Self contained meters will be set within two business days after City/County OK.
- ⇨ If meters are not set within time frames shown above, please call 775-834-7532.

Inspection/ Construction Process

Inspection/ Construction Gas

Inspection/Construction Defined: Inspection of and coordination of applicant installed contractors and or physical construction of facilities for Gas.

Gas

Inspection

Design Received in Ops

- ⇨Excavating contractor to e-mail and call Gas Inspector line, 834-7356. Leave Project ID (PID) and contact information.
- ⇨Advance notice of 2 working days required to initiate initial inspection process.
- ⇨Inspection requests are scheduled and dispatched to Inspector.
- ⇨Contractor must have knowledge of Vol. 15 standards (required).

Inspection

- ⇨Required - letter of sub-grade, certified fusers and Gas Safety cards for all personnel working with gas.
- ⇨All gas fusions, pipe, sand and warning tape to be inspected.
- ⇨24 hr. clock pressure test to 135 PSI must be completed before acceptance by NVE.

Final Inspection

- ⇨Project to be coordinated with gas construction to complete the tie-in.

All digging around gas to be completed prior to tie-in.

Construction

See Inspection

Applicant to Install. Please see Inspection process

Gas Crews

- ⇨NVE performs all gas tie-ins.

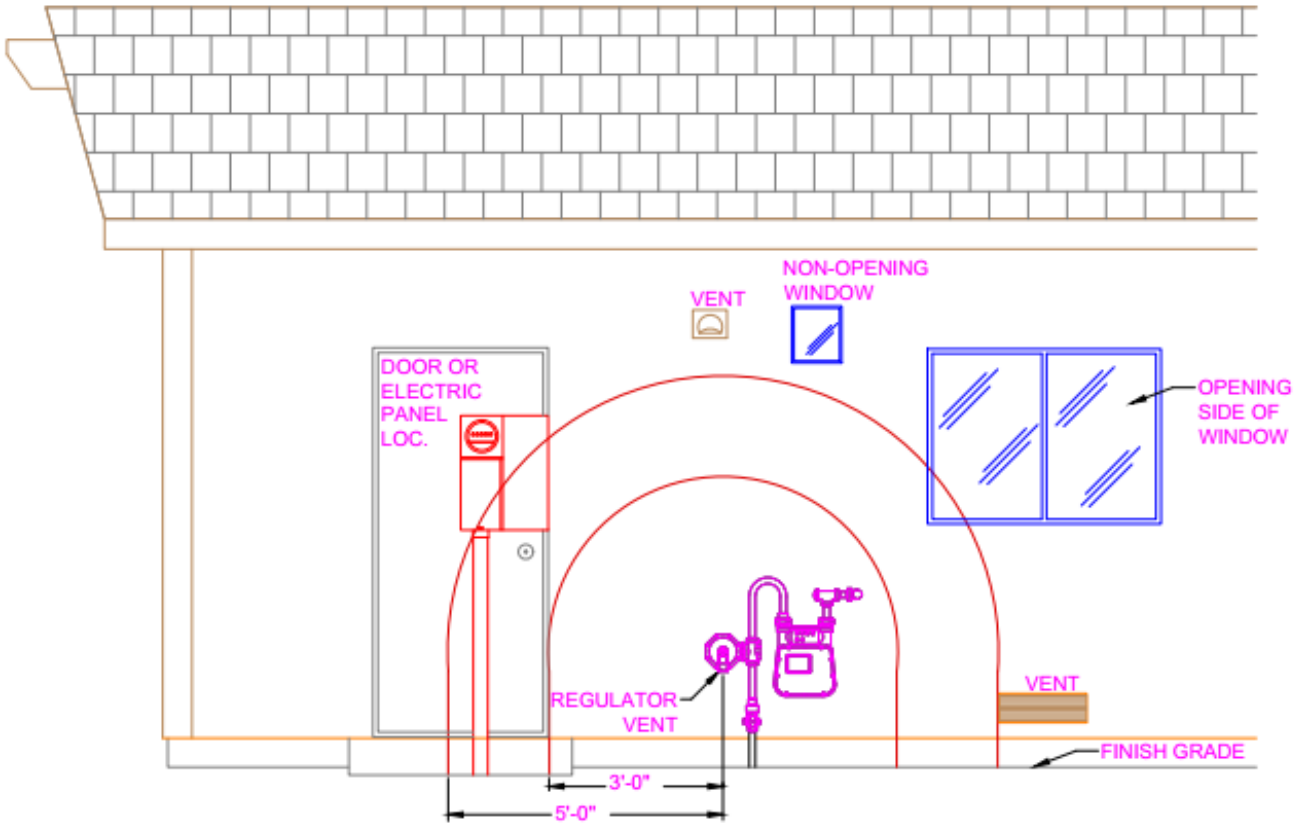
Final Construction

- ⇨Project is ready for gas service completions to be installed and meters to be set.

Do not dig within 30” of live gas until gas inspector is on site.

Volume 15 https://www.nvenergy.com/business/newconstruction/newconstructionN/standards/gas_standards/vol_15.cfm

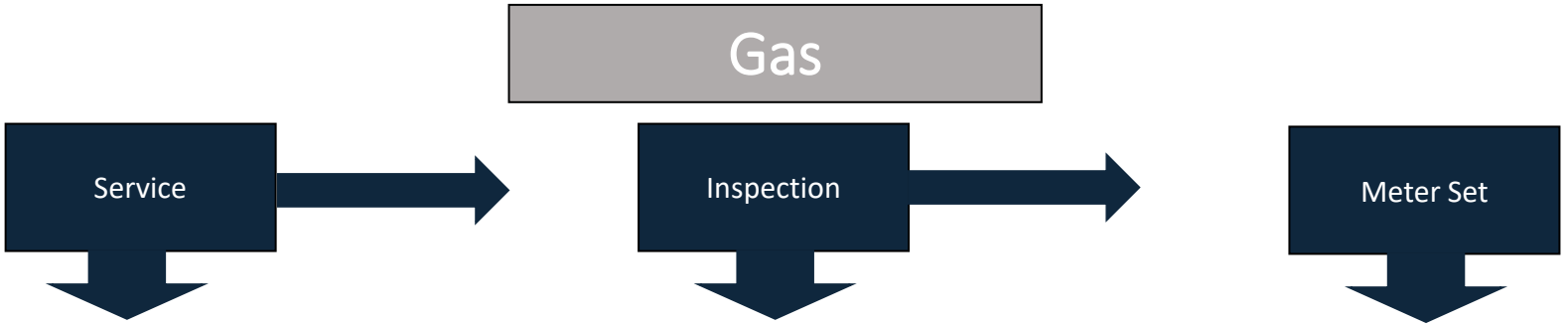
Gas Meter Clearances



THE REGULATOR VENT SHALL HAVE A MINIMUM CLEARANCE ZONE OF THREE (3) FEET FROM ANY OPENING INTO A BUILDING SUCH AS OPENING WINDOWS, DOORS, FOUNDATION VENTS, CRAWL SPACES, ELECTRIC PANELS, ELECTRIC OUTLETS, PHONE AND CATV CONDUITS, ETC, AND HAVE A MINIMUM CLEARANCE ZONE OF FIVE (5) FEET FROM POWERED AIR INTAKES (AC UNITS, SWAMP COOLERS, MAKE UP AIR VENTS, ETC.)

Service Completion & Gas Meter Set Process

Customer Owned Yard Lines are prohibited.



- ⇨ Gas meter locations must be marked by the developer or contractor according to Volume 15 standard clearances.
- ⇨ Application for gas service is created from the Line Extension Agreement (LEA).
- ⇨ Project addresses that were not provided or have changed, must be given to NVE as soon as possible to prevent a meter set delay.
- ⇨ Multi-meter manifolds require accurate addresses on brass tags.

- ⇨ 48 hour advance notice is required for Gas Service Completion. Excavating contractor to call 834-7281 and leave PID, service addresses and contact information.
- ⇨ Approved backhoe operator and laborer must be on site for backfill.
- ⇨ Gas safety cards are required to be in possession.
- ⇨ Qualified backfill list is provided at request.
- ⇨ Gas service completion normally installed within 48 hours.
- ⇨ Make sure gas riser is straight and that the bury line mark on the riser is above the finish grade.
- ⇨ Maintain standard clearances.

- ⇨ Manometer (pressure) test, City/County OK, and NVE final inspection required for all meter sets.
- ⇨ Standard meters up to 1,000 CFH will normally be set within 2 business days once approval process is complete.
- ⇨ Special pressure meters and/or meters over 1,000 CFH will normally be set within 5 business days once approval process is complete.

* If meter is not set within time frames shown above please call 834-7615.

Truckee Meadows
Operations Quick Contact

Electric	Name	Cell	Office
Trench Inspection Service Trench-by address Non-Service Trench- by Project #			834-7520
Inspection Supervisor	Kris Wines	848-3583	834-7778
Inspection Foreman	Mike Hillyer		846-9822
Inspection Scheduler	Kim Zylstra	830-1339	834-7583
Construction Supervisor	Russ Lucia	848-4215	834-7779
Construction Scheduler	Maricela Hernandez	303-4521	834-7006
Troubleman Supervisor	Jordan Bean	200-8030	834-7055
Troubleman Scheduler	Tracy Kuykendall	830-5107	834-7532
Emergency / Outage			834-4100

Gas	Name	Cell	Office
Applicant Installed Inspection			834-7356
Gas service completion			834-7281
Gas meter sets			834-7615
Foreman-Inspection	Robb Rusche	420-7967	834-7356
Inspector	Mike Kennedy	391-9233	
Inspector	Rex Mayo	846-5556	
Inspector	Kurt Welsh	846-5610	
Inspector	Tony Lewis	848-4527	
Inspector	Bret Kunkler	200-8319	
Manager, Gas Operations	Matt Brecke	233-8112	834-7071
Emergency Gas Leak			834-4100

Utility Designer Contact List – Front Desk 834-7873

TRUCKEE MEADOWS - UTILITY DESIGN CONTACT LIST				
Title	**NAME**	**EXT**	**MOBILE**	**E-MAIL**
Electric/Gas – NVE Application	New Business Development	834-7873		inforeno@nvenergy.com
Electric/Gas - Director, Dist. Design - Northern Nevada	Howard, Danyale	834-7338	848-1529	Danyale.Howard@nvenergy.com
Electric/Gas - Supervisor, Dist. Design - Reno	Ginsburg, Mike	834-7766	848-3956	Mike.Ginsburg@nvenergy.com
Electric/Gas - Supervisor, Dist. Design - Reno	Powell, Toni	834-7585	813-3985	Toni.Powell@nvenergy.com
Electric/Gas – Front Desk Designer	Feroah, John	834-7324	303-4036	John.Feroah@nvenergy.com
Electric/Gas - Designer	Aguirre Rodriguez, Ciara	834-7771	240-5589	Ciara.AguirreRodriguez@nvenergy.com
Electric/Gas - Designer	Baldridge, Jessica	834-7282	230-8152	Jessica.Baldridge@nvenergy.com
Electric/Gas - Designer	Barnes, Justin	834-7116	200-5931	Justin.Barnes@nvenergy.com
Electric/Gas - Designer	Baumann, Phil	834-7772	501-2261	Phil.Baumann@nvenergy.com
Electric/Gas - Designer	Best, Trevor	834-7770	203-8494	Trevor.Best@nvenergy.com
Electric/Gas - Designer	Brown, Ray	834-7741	379-9135	Raymond.Brown@nvenergy.com
Electric/Gas - Designer	Bunch, Rebekah	834-7722	848-3602	Rebekah.Bunch@nvenergy.com
Electric/Gas - Designer	Cunningham, Jeff	834-7436	357-2296	Jeffrey.Cunningham@nvenergy.com
Electric/Gas - Designer	Duarte, Jesse	834-2961	276-2636	Jesse.Duarte@nvenergy.com
Electric/Gas - Designer	Duesing, Carrie	834-7232	846-2003	Carrie.Duesing@nvenergy.com
Electric/Gas - Designer	Fenkell, Paul	834-7219	501-2036	Paul.Fenkell@nvenergy.com
Electric/Gas - Designer	Garcia Diaz, Juan	834-7876	775-304-7851	Juan.GarciaDiaz@nvenergy.com
Electric/Gas - Designer	Gardner, Cheryl	834-7118	771-9146	Cheryl.Gardner@nvenergy.com
Electric/Gas - Designer	Kilgore, Max	834-7296	527-9452	Maxwell.Kilgore@nvenergy.com
Electric/Gas - Designer	Martini, Chris	834-7295	636-5267	Christopher.Martini@nvenergy.com
Electric/Gas - Designer	Mustain, Joelle	834-7030	843-1950	Joelle.Mustain@nvenergy.com
Electric/Gas - Designer	Newman, Jake	834-7721	636-5063	Jake.Newman@nvenergy.com
Electric/Gas - Designer	Sipaila, Tomas	834-7775	722-5561	Tomas.Sipaila@nvenergy.com
Electric/Gas - Designer	St. Jacques, Lara	834-7222	376-3709	Lara.StJacques@nvenergy.com
Electric/Gas - Designer	Stone,Denise	834-7235	544-6378	Denise.Stone@nvenergy.com

Resources

Electric - Volume 17

https://www.nvenergy.com/business/newconstruction/newconstructionN/standards/electric_standards/vol_17.cfm

Gas - Volume 15

https://www.nvenergy.com/business/newconstruction/newconstructionN/standards/gas_standards/vol_15.cfm

Our Commitment

- Discovery – 3 weeks at Level I, 6 weeks at Level II
- Design Initiation Agreement (DIA) – 15 days (complete information)
- Executed DIA to Design Acceptance Agreement (DAA) – 25 days
- DAA to Line Extension Agreement (LEA) – 10 days (providing all easements/permits obtained)
- Electric and Gas Inspection – 48 hours for initial inspection start, 24 hours for specific inspections
- Electric construction – 7 to 10 working days after final inspection (during heavy construction could be up to 15 working days)
- Electric and Gas meter sets after City/County OK and final inspections:
  - Electric self contained meter set – within 2 business days
  - Electric instrument rated meter set – within 5 business days
  - Gas standard meter up to 1,000 CFH – within 2 business days
  - Gas special pressure or meter over 1,000 CFH – within 5 business days