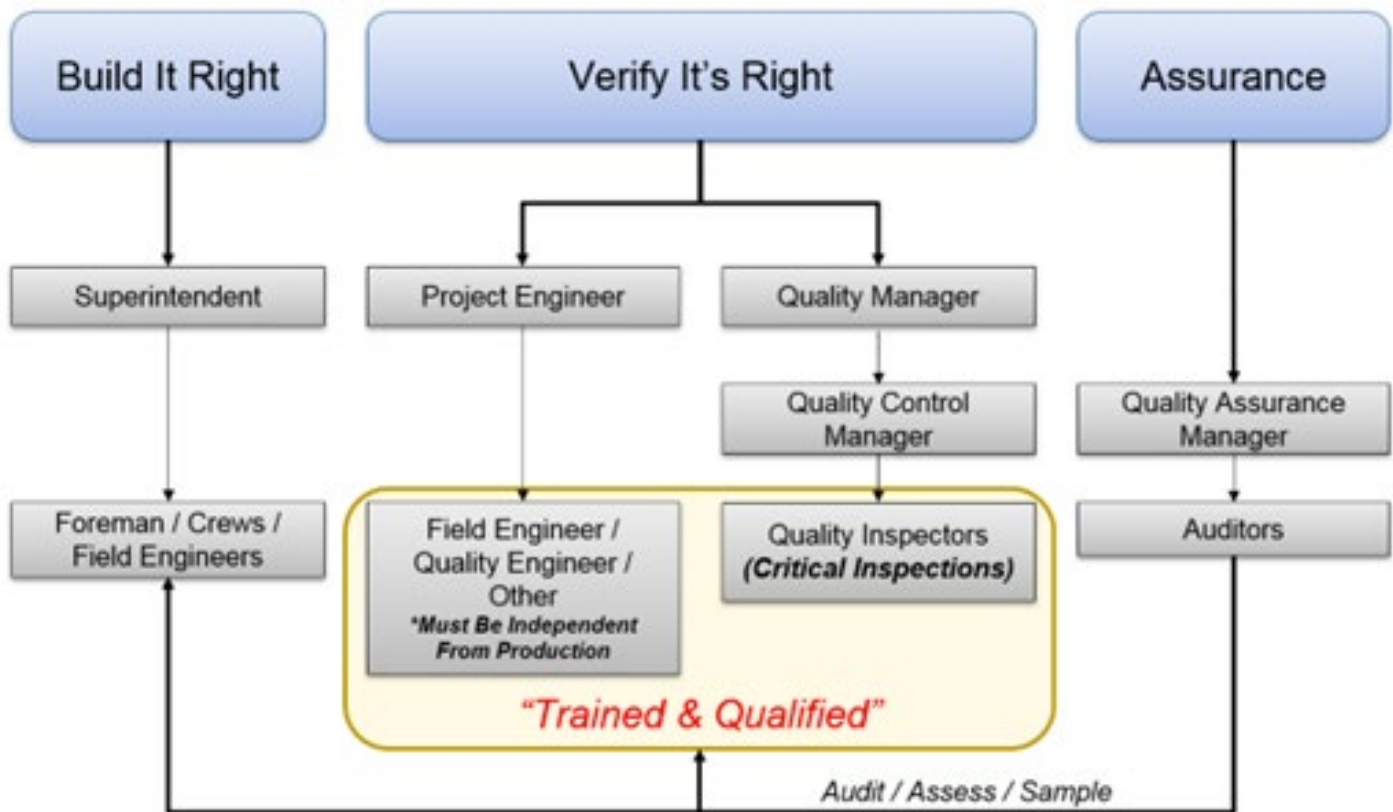







Kiewit's quality culture is Staff, Craft, Third Parties and Subcontractors leading and taking responsibility for the quality of their work, with a determined effort to prevent rework and do the job **“Right the First Time”**



- The **Superintendent** is responsible for following the work planning process, coordinating the inspection of our work and build the work with no punch list.
- Our **Foreman** must fully understand the work plan and clearly communicate it to craft. They must also inspect the work as performed to ensure conformance to work plan with adherence to identified monitoring, witness and/or hold points.
- Our **Craft** must review work plans so they fully understanding the task(s) to be performed. Craft must self report a Quality incident for proper disposition.

 <b>KNOW IT</b>	 <b>BUILD IT</b>	 <b>CHECK IT</b>
<ul style="list-style-type: none"> <li>• Review RFP, estimate, contract, code and specification requirements</li> <li>• Identify and document all quality requirements</li> <li>• Develop PQEP using applicable templates</li> <li>• Understand quality inspections</li> <li>• Train for verification of completed work</li> </ul>	<ul style="list-style-type: none"> <li>• Adhere to approved work planning process</li> <li>• Verify work plans have meaningful safety and quality topics and review during pre-job brief</li> <li>• Ensure construction tolerances are known and built to during execution</li> <li>• Finalize work as you go to make certain you have a zero-item punchlist</li> </ul>	<ul style="list-style-type: none"> <li>• Self-check work</li> <li>• Verify work is proper prior to claiming completion</li> <li>• Validate the Inspection and Test Plan (ITP) is being followed</li> <li>• Verify subcontractor/supplier work or materials meets project quality expectations</li> </ul>

# Inspection & Test Plan - ITP



An ITP is your primary tool for communicating contractual requirements to your crew.

- The ITP identifies all inspection and testing requirements for each activity.

Activity Description	Spec/Code/Standard/ProcedureStandard/Procedure	Inspection and Testing Requirements
Flange Bolt-Up Verification (Greater Than or Equal to 600# or Hazardous Service)	Flange Bolt Up PKS-PRO-PIPE-5.02 PKS-PRO-PIPE-5.07 Spec xxx	When using a spiral wound gasket, ensure it is fully compressed and that the outer ring is in full contact with the flange faces around the circumference. - When using a soft gasket with a known compression percentage, the flange gap required can be easily measured and verified. - For all tensioning/torquing values/ sequencing, refer to manufacturer requirements. - Flange Face acceptable per xxx. - Internal Cleanliness verified per xxx.
Expansion Joint Installation Verification	Metallic Pipe Installation PKS-PRO-PIPE-5.02	Install per manufacturer requirements.

- Documentation required or visual
- Documentation required for turnover
- Frequency of inspections

Documentation		
Document Name / Tag # / Visual	Turnover / Commissioning?	Frequency
Visual Flange Bolt Tightening Record PKS-FRM-PIPE-5.07.01 Bolt Tensioning Record PKS-FRM-PIPE-5.07.04	Yes	All
Expansion Joint Checklist PKS-FRM-PIPE-5.07.03	No	All

- Quality risk level:
  - Level 1 – Low Risk: Very low risk of affecting end product
  - Level 2 – Moderate Risk
  - Level 3 – High Risk: Highest criticality and level of rigor

Risk Owners					
Risk Level	FE	QC	QA	Client	Other
High	Inspect	Verify	Assure		
Low	Inspect				

- Type of inspection required:
  - Verify – Requires a physical inspection of the work independent of operations.
  - Assure – Review of work procedures, systems, processes, and end product quality.
  - Hold Point – Requires physical inspection of a completed work step prior to progressing to the next work step.
  - Witness – Formal notification of inspection required. Inspection may proceed if waived.



## QUALITY OWNERSHIP CULTURE

Through a proactive approach by planning and prevention, operations owns quality performance and each employee takes responsibility for the quality of work they produce.