QUALITY CONTROL CHECKLISTS

FOR FOUNDATION INSPECTION OF

RESIDENTIAL AND OTHER LOW-RISE BUILDINGS

by
The Structural Committee

of
The Foundation Performance Association

www.foundationperformance.org

Houston, Texas

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ISSUE HISTORY

Rev#	Date	Description	Subcommittee Chair	Subcommittee Members
A	02 Oct 01	For Subcommittee Comments	Jack Spivey	Ron Kelm Jon Monteith Michael Skoller Terry Taylor Mari Mes Mike Palmer Lowell Brumley George Wozny Dan Jaggers Toshi Nobe
B	19 Sep 02	For Subcommittee Comments		
C	14 Oct 02	For Subcommittee Comments		
D	26 Nov 02	For Subcommittee Comments		
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PREFACE

The following documents are the results of two years of work completed in the late nineteen nineties by the Inspections Subcommittee of the Foundation Performance Committee. Jack Spivey chaired this committee and his fellow members were:

MR. MICHAEL SKOLLER P.E.

MR. JOE EDWARDS

MR. LOWELL BRUMLEY P.E.

MR. DEAN EICHELBERGER

Meetings took place on a monthly basis and were attended by many interested parties. Special recognition should be given to Mr. Jim Dutton of Du-West Foundation Repair and Mr. Dan Jaggers of Olshan Foundation Repair. Their assistance with the foundation repair sections was invaluable. The topics for discussion have followed a general outline, which was established at the onset of the meetings. It was determined that our basic intent would be to establish a set of standards and procedures for the inspection of foundation construction and foundation repairs. These standards were to be incorporated into an inspection document, which would be thorough in its scope, but also easy to use. It was established early on in our discussions that the best form for our purposes would be a simple checklist, which would fully cover the subject of the inspection. It was also determined that keeping the checklist to one page would afford the most user-friendly instrument for our purposes. Once these parameters were established the subjects of the inspections were taken in the following order:

FOUNDATION MAKE-UP -- POST TENSION
STRESSING POST TENSION
FOUNDATION MAKE-UP -- CONVENTIONAL/REBAR
CONCRETE PLACEMENT
CONSTRUCTION PIERS
REPAIR PIERS
SEGMENTED REPAIR PILES

These topics were judged to represent the major types of foundation construction and foundation repairs found in the Houston area. They are certainly not inclusive of every inspection situation or construction method in use, but they do offer a basic set of standards for the majority of inspections that would be encountered in typical residential construction.

They are also designed to be used by anyone who has some knowledge of foundation construction. It was our intention that they would serve field inspectors, builders, builders' superintendents, municipal inspectors, or anyone with an interest in quality foundations.

The first order of business worked on by the subcommittee was to establish a heading format for each inspection. This portion of the form is meant to establish a context for the inspection. The basics of the site such as, the builder, subdivision, address, lot and block, are all set out at the top of the form. The next section is meant to establish the parameters that will govern the rest of the inspection. The most important of these, deals with the plans. No inspection should be undertaken without a set of plans, which should include the name of the engineer, the date of the plans and the detail sheet. Other pertinent details of the site that are covered in this section are the date, the time, the weather, and whether there is a detached garage.

The above guidelines were followed on each form, with the following variations dictated by the context of the inspection:

- For the Concrete Placement Form there is specific reference to the Foundation Make-Up Form, and the items in need of repair.
- In the Stress Form, there is an added reference to the cable count, the concrete placement date, and the post tension construction company.
- On the Construction Piers Form, there is a reference to the Geotechnical Engineer, and on the Repair Piers and Segmented Repair Piles Forms, there is reference to the design documentation and the municipal permit.

Once the context is established in the heading, the form moves on to sections relating to different aspects of each inspection. In general, these sections are documented by simply checking the item to show that it has been correctly completed. **The checkmark *(✓)* serves to show that the item has been considered and complies with the plans, whereas an x *(X)* denotes that the item does not comply with the plans.** In some sections, direct questions are asked that should be answered. Finally, the lower sections of the forms generally have reference to a drawing of the slab, the piers or piles, or the foundation being repaired. The drawings further document the conditions specific to the site and the foundation and allow the inspector to orient the data being described in the conclusion of the inspection.

Each of these forms represents an attempt to document the events related to a specific foundation project or a specific foundation repair. It should be remembered that all the answers and data reported are typically the only documentation of what actually happened during this phase of construction. For this reason, every item is pertinent and should be given careful consideration during the inspection. Though many of the items listed are fairly common knowledge to the typical inspector or builder, it is the sequencing and nuances of certain questions and items listed, which are the greatest advantage of using the forms. The committee felt that all major items such as beam size, tendon counts, plan dates, etc., were adequately covered in each form.

It should be noted that the Repair Piers and Segmented Repair Piles Forms contain information that is not found in any established sources or specifications. This is particularly true of the Segmented Repair Piles Form. It was generally agreed that these items are rarely inspected by an independent inspector.

This document is made freely available to the public through the Foundation Performance Association at www.foundationperformance.org so engineers, architects, inspectors, contractors, and other professionals involved in the quality control of foundations systems for residential and low-rise buildings may have access to the information. To ensure the document remains as current as possible, it will be periodically updated under the same document number but with new revision numbers. Please direct suggestions for improvement to the current chair of the structural committee.

QC Checklists

1. **POST-TENSION SYSTEM FOUNDATION MAKE-UP**
2. **CONCRETE PLACEMENT**
3. **POST-TENSION SYSTEM STRESSING**
4. **CONVENTIONAL (REBAR) FOUNDATION MAKE-UP**
5. **CONSTRUCTION (BUILDERS) PIERS**
6. **REPAIR PIERS**
7. **SEGMENTED REPAIR PILES**

CLIENT_____ **QUALITY CONTROL COMPANY**_____

QC Checklist #1 - POST-TENSION SYSTEM FOUNDATION MAKE-UP

Builder_____ Subdivision_____ Date_____ Time_____
Site Address_____ Lot_____ Blk_____ Sec_____ Plan site specific Yes ☐ No ☐
Plan #:_____ Cable Count_____ Design Engineer_____ Superintendent_____
Plan provided at site Yes ☐ No ☐ Weather_____ Plan Date_____ Detail Sheet Date _____
Concrete Contractor_____ Detached Garage Yes ☐ No ☐ Permit #:_____

Check (✓) If Items Comply With The Plans
(X) If Items Do Not Comply With The Plans

SITE
Subdivision Lot _____ Other _____
Lot Description_____
Fill on site Yes ☐ No ☐
Compaction verified by Geotechnical Engineer:
Yes ☐ No ☐ Date_____
Will foundation make up drain: Yes ☐ No ☐
Trees removed_____
Are trees within 20' of foundation Yes ☐ No ☐

FORMS
☐ Forms secure
☐ Floats installed
☐ Proper clearance at floats
☐ Garage front closed

ADDITIONAL REVIEWS
Date_____ Time_____

SLAB
☐ Thickness_____(in)
☐ Measured: Screeds_____ Stringline_____ Other_____
☐ Describe Pad Material _____
☐ Level and Firm Yes ☐ No ☐

BEAMS
☐ Design Depth: _____(in) Exterior_____ Interior_____
☐ Actual Depth:_____(in) _____(in) _____(in) _____(in)
☐ Design Width:_____(in)
☐ Actual Width:_____(in) _____(in) _____(in) _____(in)
☐ Average depth into undisturbed soil_____(in)
☐ Clean of soil & debris
☐ Water in beams Yes ☐ No ☐ Average Depth_____(in)
☐ Will water drain Yes ☐ No ☐
☐ Plumbing obstructions accommodated _____
☐ Pier tops clean

TENDONS
Count: L to R_____ F to B_____Garage_____
Total ____ Variance ___Explain_____
Number of tendons left on site_____Rebar_____
☐ 1/2" tendons _____Other
☐ No tendons spaced over 6'-0"
☐ 20D nails used at castings
☐ Live ends stripped of plastic not over 1" or taped
☐ Cathead clamps all tight
☐ All intersections tied
☐ All tendons supported at intersections
☐ Dead ends have 3/4" clearance to forms
☐ All S Hooks crimped
☐ Beam tendons draped and secured by #3 stakes or rebar concrete bricks
☐ Ample chairs all tied
Tendon grid secured for concrete placement Yes ☐ No ☐

POLYETHYLENE SHEETING
☐ 6-mil.Lapped and Taped ☐ Seated in bottom of beams secured at sides ☐ Mastic/tape applied at plumbing

REINFORCING STEEL
SLAB SECTION
WWF: (Mesh)Size_____ Roll_____ Sheet_____ **OR** ☐ #3 @_____(in.) on center both ways
☐ All WWF (mesh) seams lapped 6" ☐ #3 Lapped per plans ☐ All edges 2" from forms
☐ No rebar or WWF (mesh) touching forms

BEAM SECTION
Rebar: grade ____ Clearances per plan: Sides ☐ Bottom ☐ Top ☐
☐ Splices lapped per plan
☐ Corner rebar installed at corners & dead ends
Typical Rebar/Exterior Beams _____ continuous
Typical Rebar/Interior Beams _____ continuous
Corner bars installed at dead ends Yes ☐ No ☐
Bay Windows or Porches _____ Rebar _____ Stirups _____
Extra Rebar Added _____
Diagonal Rebar at Re-entrant Corners ☐ No. of Corners_____
Nose Bars @ _____ Construction Joints _____
Anchor bolts on site Yes ☐ No ☐ Diameter _____(in) Length_____ (in)
Other Fasteners_____

IS FOUNDATION READY FOR CONCRETE? Yes ☐ No ☐

Sketch

CHANGES NEEDED:_____

Quality Controller's Signature **Superintendent's Signature**

CLIENT_____ **QUALITY CONTROL COMPANY**_____

QC Checklist #2 - CONCRETE PLACEMENT

Builder_____ Subdivision_____ Date_____ Time_____
Site Address_____ Lot_____ Blk_____ Sec_____ Plan #:_____ Cable Count_____
Design Engineer_____ Superintendent_____ Q.C. Arrival Time___ Departure Time____
Copy of Foundation Makeup Report Provided Yes ☐ No ☐ Date of Copy_____ Items Repaired Yes ☐ No ☐
Concrete Contractor_____ Detached Garage Yes ☐ No ☐ Permit #:_____

Check (✓) If Items Comply With The Plans
(X) If Items Do Not Comply With The Plans

SITE
Subdivision Lot _____ Other _____
Lot Description_____
Are there obstructions at the site which would prevent access for concrete trucks Yes ☐ No ☐
Explain _____

FORMS
☐ Forms secure
☐ Floats installed
☐ Proper clearance at floats
☐ Garage closed in

ADDITIONAL REVIEWS
Date_____ Time_____

WEATHER
Weather conditions START:_____ FINISH:_____
Will temperature rise above 40° F for five hours _____
Forty-eight hour forecast: HIGH TEMPERATURE:_____ LOW TEMPERATURE:_____

CONCRETE
Concrete Company _____ Batch Plant _____ Tickets on site? Yes ☐ No ☐
Delivered by truck over what distance _____ Was a pump used Yes ☐ No ☐ Pump Co._____
Mix : _____ psi _____psi "pump mix"– Pump Prime Placed outside of form Yes ☐ No ☐
Sack Mix: _____4 _____ 5 _____ 6 **OR** Strength Mix Yes ☐ No ☐ Strength _____
Additives: _____ **NO CALCIUM CHLORIDE–**APPLIES TO POST TENSION SLAB
Fly Ash: Type C? Yes ☐ No ☐ _____%
Slump as ordered from plant _____ (in)
Explain (Discrepancies if slump is different): _____
Was concrete consolidated by vibrator Yes ☐ No ☐ Other ☐ _____
Test Cylinders Taken Yes ☐ No ☐ Testing Company _____
Slump Test Taken Yes ☐ No ☐ Testing Company _____
If water is added at the jobsite, show the amounts over ten gallons and give a visual estimate of the final slump

Draw a diagram of the slab below showing the locations of each load by truck number

Truck #	Time Poured Out	Gallons Added	Placement Location	Est. Slump	Tested Slump	Temp.

Anchor bolts on site Yes ☐ No ☐ Diameter _____(in) Length_____ (in)
Other Fasteners_____
Describe provisions for curing_____

SKETCH

ADDITIONAL COMMENTS: _____

Quality Controller's Signature **Superintendent's Signature**

CLIENT_____ **QUALITY CONTROL COMPANY**_____

QC Checklist #3 – POST-TENSION STRESSING

Builder_____ Subdivision_____ Date_____ Time_____
Site Address_____ Lot_____ Blk_____ Sec_____ Plan site specific Yes ☐ No ☐
Plan #:_____ Cable Count_____ Design Engineer_____ Superintendent_____
Plan provided at site Yes ☐ No ☐ Weather_____ Plan Date_____ Detail Sheet Date _____
Concrete Placement Date_____ Stress Date _____ Partial Stress Date_____
Post Tension Company_____ Permit #:_____

Check (✓) If Items Comply With The Plans
(X) If Items Do Not Comply With The Plans

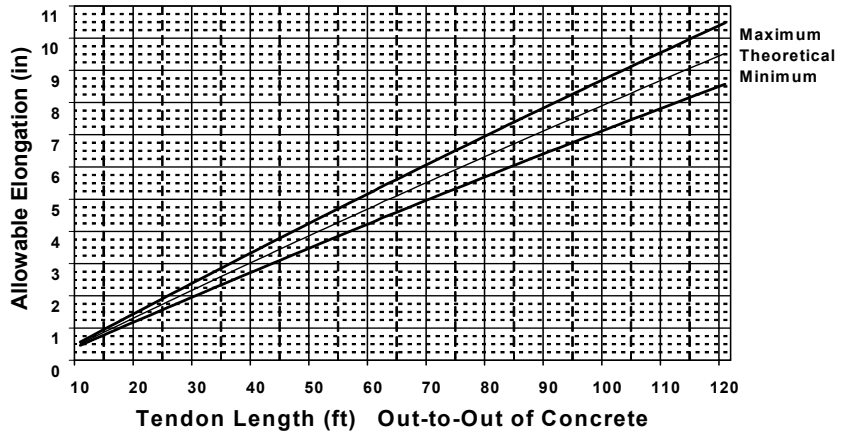
☐ Are there any cracks in the surface of the slab Yes ☐ No ☐ Describe_____

ADDITIONAL REVIEWS
Date_____ Time_____

Estimate size and locate on the sketch below
☐ Are elongations specified on the plans Yes ☐ No ☐
☐ Are the tendons painted at the edge of the slab Yes ☐ No ☐
☐ What is the predetermined distance between the mark and the edge of the slab ____(in)
☐ Are the wedges placed in a vertical position Yes ☐ No ☐
☐ Is there evidence of gripper marks on the gripper end of all tendons Yes ☐ No ☐ **(If no show location on sketch below)**
☐ Are tendons stressed from two ends Yes ☐ No ☐ If So, How Many _____

1/2" Diameter Tendon Elongation Measurements

(Min/Max Range Recommended by PTI)



USE CHART IF ELONGATIONS ARE NOT LISTED ON PLAN, OR MULTIPLY TENDON LENGTH IN FEET BY 0.08 TO CALCULATE APPROXIMATE ELONGATION IN INCHES FOR LENGTH OVER 30 FEET.

SKETCH

Draw a simple sketch of the foundation configuration noting all tendon locations and their elongation measurements. Also note any problems which you have observed, particularly blowouts at corners or the garage entry and cracks.

FOLLOWING STRESS VERIFICATION

☐ Are the tendon ends cut inside the pocket former
☐ After stressing are the nails cut
☐ Are the tendon ends grouted with a non-shrink grout

Quality Controller's Signature **Superintendent's Signature**

CLIENT_____ **QUALITY CONTROL COMPANY**_____

QC Checklist #4–CONVENTIONAL (REBAR) FOUNDATION MAKE-UP

Builder_____ Subdivision_____ Date_____ Time_____
Site Address_____ Lot_____ Blk_____ Sec_____ Plan site specific Yes ☐ No ☐
Plan #:_____ Design Engineer_____ Superintendent_____
Plan provided at site Yes ☐ No ☐ Weather_____ Plan Date_____ Detail Sheet Date _____
Concrete Placement Date_____ Detached Garage Yes ☐ No ☐ Permit #_____

Check (✓) If Items Comply With The Plans
(X) If Items Do Not Comply With The Plans

SITE
Subdivision Lot _____ Other _____
Lot Description_____
Fill on site Yes ☐ No ☐
Compaction verified by Geotechnical Engineer:
Yes ☐ No ☐ Date_____
Will make up drain: Yes ☐ No ☐
Trees removed_____
Are trees within 20' of foundation Yes ☐ No ☐

FORMS
☐ Forms secure
☐ Floats installed
☐ Proper clearance at floats
☐ Garage front closed

ADDITIONAL REVIEWS
Date_____ Time_____

SLAB
☐ Thickness_____(in)
☐ Measured: Screeds_____ Stringline_____ Other_____
☐ Describe Pad Material _____
☐ Level and Firm Yes ☐ No ☐

BEAMS
☐ Design Depth: _____(in) Exterior_____ Interior_____
☐ Actual Depth:_____(in) _____(in) _____(in) _____(in)
☐ Design Width:_____(in)
☐ Actual Width:_____(in) _____(in) _____(in) _____(in)
☐ Average depth into undisturbed soil_____(in)
☐ Clean of loose soil & debris
☐ Water in beams Yes ☐ No ☐ Average Depth_____(in)
☐ Will water drain Yes ☐ No ☐
☐ Plumbing obstructions accommodated _____
☐ Pier tops clean Yes ☐ No ☐

POLYETHYLENE SHEETING
☐ 6-mil.Lapped and Taped ☐ Seated in the bottom of beams
secured at sides ☐ Mastic/tape applied at plumbing

CONSTRUCTION PIERS
Number of piers _____ Are pier tops clean of debris Yes ☐ No ☐

REINFORCING STEEL
Grade of Steel _____

BEAM SECTIONS
Exterior Beams: Steel size_____ Number top _____ Bottom _____ Stirrup size _____ Spacing _____(in)
Interior Beams: Steel size_____ Number top _____ Bottom _____ Stirrup size _____ Spacing _____(in)
Extra Beam depth Yes ☐ No ☐ Additional steel required _____
Proper Clearance: Bottom _____ (in) Sides _____(in) Top _____(in) Support System _____
Continuity: Splices lapped per plan Yes ☐ No ☐ Corner bars installed Yes ☐ No ☐
Rebar clean of mud and excessive rust Yes ☐ No ☐
Void Boxes in bottom of beam Yes ☐ No ☐ Height _____(in) Condition_____

SLAB REINFORCING
Mesh: Size_____ Roll_____ Sheet_____ **OR** ☐ #3 @_____(in.) on center both ways
☐ All mesh seams lapped 6" ☐ #3 Lapped per plans ☐ All edges 2" from the forms
☐ No rebar or mesh touching forms
Void Boxes Yes ☐ No ☐ Height ___(in) Poly covering void boxes Yes ☐ No ☐

ADDITIONAL REINFORCING
Diagonals: Size _____ Number in slab_____
Fireplace pads: Size of steel _____ Placement_____
Bay windows: Size of steel _____ Placement_____
Other projections: _____ Control joints_____
Construction joints: _____
Anchor bolts on site Yes ☐ No ☐ Diameter _____(in) Length_____ (in)
Other Fasteners_____

IS THE FOUNDATION READY FOR CONCRETE PLACEMENT? Yes ☐ No ☐ **SKETCH**
CHANGES NEEDED: _____

Quality Controller's Signature **Superintendent's Signature**

CLIENT_____ **QUALITY CONTROL COMPANY**_____

QC Checklist #5 – CONSTRUCTION (BUILDER'S) PIERS

Builder_____ Subdivision_____ Date_____ Time_____
Site Address_____ Lot_____ Blk_____ Sec_____ Plan site specific Yes ☐ No ☐
Plan #:_____ Design Engineer_____ Superintendent_____ Geotechnical Engineer _____
Plan provided at site Yes ☐ No ☐ Plan Date_____ Detail Sheet Date _____
Weather at site_____ Concrete Contractor_____ Geotechnical Report #_____

(THIS FORM NOT APPLICABLE FOR SLURRY PLACED PIERS)

Check (✓) If Items Comply With The Plans
(X) If Items Do Not Comply With The Plans

SITE
Subdivision Lot_____ Other _____ Explain_____
Fill on site Yes ☐ No ☐
Compaction verified by Geotechnical Engineer Yes ☐ No ☐ Date_____
Trees removed Yes ☐ No ☐ Location:_____
Are trees within 20' of foundation Yes ☐ No ☐

ADDITIONAL REVIEWS
Date_____ Time_____

PIERS
Name of drilling company: _____
Can drill equipment access all pier locations Yes ☐ No ☐
Type of drilling apparatus: Truck Mounted_____ Bobcat:_____ Other:_____
Total number of piers: _____

PIER SIZES

Shaft	Bell Dia.	Pier Depth	No. Rebar	Rebar Size	Stirrups Piers	Spacing	Total
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____

Sketch Typical Pier Showing Depth

Describe the manner of measuring the bell sizes:_____
(Bell checking tool required)
Boring logs from Geotechnical report on site Yes ☐ No ☐
Describe bearing strata: _____
_____
Pocket Penetrometer reading taken from auger cutting Yes ☐ No ☐ _____ TSF Note locations below_____
Was water apparent in pier hole Yes ☐ No ☐ Depth_____" Action Taken_____

REINFORCING

Rebar placed per plan Yes ☐ No ☐
Rebar grade_____
Does rebar extend above pier top Yes ☐ No ☐ How much above_____(in) Sleeved Yes ☐ No ☐ Describe_____

CONCRETE
Will concrete truck be able to access site Yes ☐ No ☐
Concrete company:_____ Truck numbers:_____
Was pump truck used Yes ☐ No ☐
Specified strength of concrete: _____ psi
Was concrete placed on the same day as the pier drilling Yes ☐ No ☐
Estimated time of completion_____
If not, explain: _____
Draw a sketch of the structure indicating the pier placement

SKETCH

ARE THE PIER HOLES READY FOR CONCRETE PLACEMENT Yes ☐ No ☐
CHANGES NEEDED: _____
_____
_____

Quality Controller's Signature **Superintendent's Signature**

CLIENT_____ **QUALITY CONTROL COMPANY**_____

QC Checklist #6 – REPAIR PIERS

Owner_____Subdivision_____Date_____Time_____
Site Address_____Lot_____Blk_____Sec_____ Plan site specific Yes ☐ No ☐
Plan #:_____Design Engineer_____Superintendent_____Geotechnical Engineer _____
Plan provided at site Yes ☐ No ☐ Plan Date_____Detail Sheet Date _____
Weather at site_____Permit #_____Geotechnical Report #_____

Check (✓) If Items Comply With The Plans
(X) If Items Do Not Comply With The Plans

SITE

Subdivision Lot _____ Other _____ Explain_____
Soils Report on site Yes ☐ No ☐ Bearing Soils at what depth _____(ft)
Test hole drilled to what depth _____(ft) Bearing soils at _____(ft)
Underground plumbing test Yes ☐ No ☐ Water lines under slab Yes ☐ No ☐
Site obstructions to drilling, Describe:_____
Trees removed Yes ☐ No ☐ Location_____

ADDITIONAL REVIEWS

Date_____ Time_____

UNDERPINNING

Name of repair contractor: _____
Method of repair:_____
Total number of piers: _____ Interior ____ Exterior _____

PIER SIZES

Shaft	Bell Dia.	Pier Depth	No. Rebar	Rebar Size	Stirrups Piers	Spacing	Total
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____
_____(in)	_____(in)	_____ (ft)	_____	_____	_____	_____ (in)	_____

Sketch Typical Pier Showing Depth

Describe the manner of measuring the bell sizes:_____
(Bell checking tool required)
Describe bearing strata: _____
_____
Pocket Penetrometer reading Yes ☐ No ☐ _____ TSF Note locations below_____
Was water apparent in pier hole Yes ☐ No ☐ Depth_____" Action Taken_____

REINFORCING

Rebar per plans Yes ☐ No ☐
Rebar grade_____

HELICAL PIERS

Test hole depth _____(ft) Bearing Data _____ Pier Log Onsite Yes ☐ No ☐
Helix Size _____ Bracket Style _____ Shaft Diameter _____

CONCRETE

Will concrete truck be able to access site Yes ☐ No ☐ Was pump truck used Yes ☐ No ☐
Concrete company:_____ Truck numbers:_____ Batch Time _____ Onsite Time_____
Specified strength of concrete: _____ psi Slump as delivered _____ Water added Yes ☐ No ☐ Amount _____
Was concrete placed on the same day as the pier was belled Yes ☐ No ☐
Projected time of completion of concrete placement _____
If not, explain: _____
ESTIMATED MAXIMUM LIFT _____INCHES: TO BE GROUTED Yes ☐ No ☐
Draw a sketch of the structure indicating the pier placement

SKETCH

ARE THE PIER HOLES READY FOR CONCRETE PLACEMENT Yes ☐ No ☐
CHANGES NEEDED: _____
_____
_____

Quality Controller's Signature **Superintendent's Signature**

CLIENT_____ **QUALITY CONTROL COMPANY**_____

QC Checklist #7 – SEGMENTED REPAIR PILES

Builder_____ Subdivision_____ Date_____ Time_____
Site Address_____ Lot_____ Blk_____ Sec_____ Plan site specific Yes ☐ No ☐
Plan #:_____ Design Engineer_____ Superintendent_____ Geotechnical Engineer _____
Plan provided at site Yes ☐ No ☐ Plan Date_____ Detail Sheet Date _____
Weather at site_____ Permit #_____ Geotechnical Report #_____

Check (✓) If Items Comply With The Plans
(X) If Items Do Not Comply With The Plans

SITE
Subdivision Lot _____ Other _____ Explain_____
Geotechnical Report on site Yes ☐ No ☐ Bearing Soils at what depth _____(ft)
Test hole drilled to what depth _____(ft) Bearing soils at _____(ft)
Underground plumbing test Yes ☐ No ☐ Water lines under slab Yes ☐ No ☐
Site obstructions to drilling, Describe:_____
Trees removed Yes ☐ No ☐ Location_____
Were builder's piers present Yes ☐ No ☐

ADDITIONAL REVIEWS
Date_____ Time_____

UNDERPINNING
Name of repair contractor: _____
Piling system:_____
Total number of piles: _____ Interior _____ Exterior _____

FIELD OBSERVATIONS

		(A)	(B)	(C)	(D)	(E)		
Pile Size		**Segment**	**Number of**	**Pile Cap**	**Pile Cap**	**Distance From Top of Slab To Top of Pile Cap**	**Total Depth From Top of Slab**	**Observed Measurement of Lift at Refusal**
Round	**Square**	**Length**	**Segments**	**Size**	**Quantity**			
_____(d)	_____(in)	_____ (in)	_____	_____	_____	_____	_____ (ft)	_____ (in)
_____(d)	_____(in)	_____ (in)	_____	_____	_____	_____	_____ (ft)	_____ (in)
_____(d)	_____(in)	_____ (in)	_____	_____	_____	_____	_____ (ft)	_____ (in)
_____(d)	_____(in)	_____ (in)	_____	_____	_____	_____	_____ (ft)	_____ (in)
_____(d)	_____(in)	_____ (in)	_____	_____	_____	_____	_____ (ft)	_____ (in)

(A x B) + (C x D) + E = TOTAL DEPTH

Total number of pilings observed driven to completion _____ *(Minimum five is recommended)*
Was pile log available at the site Yes ☐ No ☐ Explain _____
Were the piles shimmed immediately upon completion of being driven Yes ☐ No ☐
If no, explain _____
Is the piling cap horizontal Yes ☐ No ☐ If no, explain _____
Were the piles driven without interruption Yes ☐ No ☐ If no, explain _____
Were builders piers detached prior to jacking Yes ☐ No ☐
Were final shims determined to be tight Yes ☐ No ☐
What is the method of interlock _____
Were interior piles installed Yes ☐ No ☐ If so, were tunnels used Describe _____
Was dewatering system used and maintained in excavating and tunnels Yes ☐ No ☐
Describe materials used in backfilling tunnels _____
Describe method of protecting tunnel entrance from water intrusion _____
Was jetting required to install piles Yes ☐ No ☐ Explain_____
ESTIMATED MAXIMUM LIFT _____INCHES: TO BE MUD PUMPED Yes ☐ No ☐

Draw a sketch of the structure indicating the pile placement

CHANGES NEEDED: _____

Quality Controller's Signature **Superintendent's Signature**