

18" DRILLED SHAFT
Located at bridge abutment wingwalls.

24" DRILLED SHAFT
Located at prestressed concrete slab beam bridges.

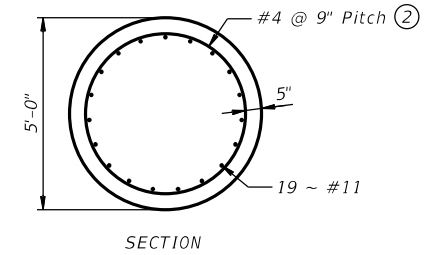
30" DRILLED SHAFT
Located at bridge abutments or prestressed concrete slab beam bridges.

36" DRILLED SHAFT
Located at bridge abutments and select bridge bents.

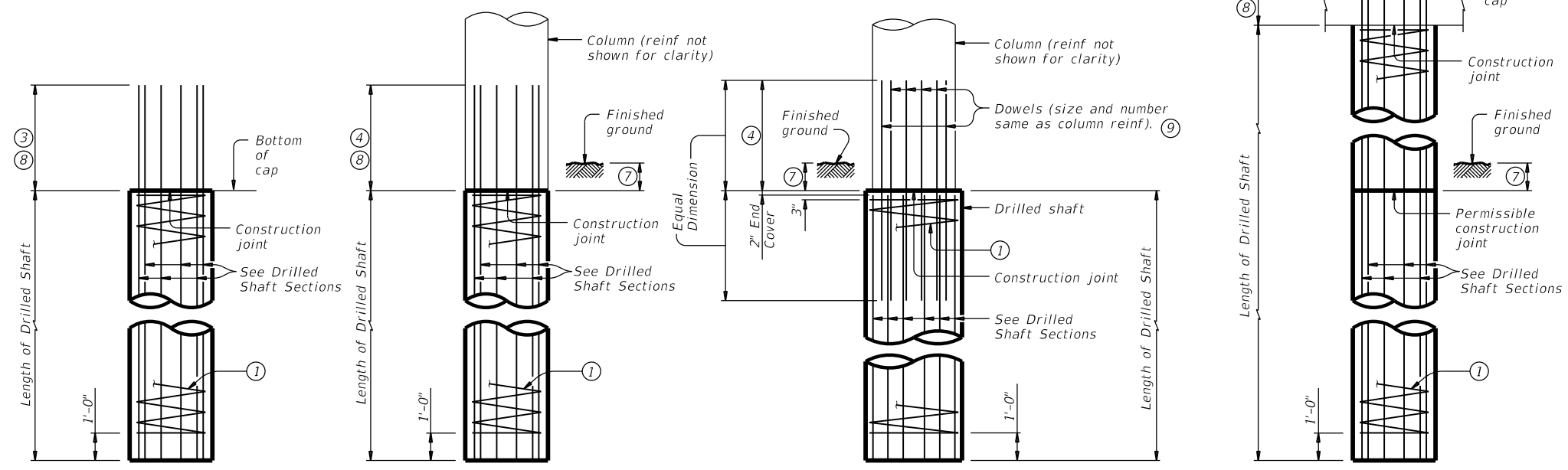
42" DRILLED SHAFT
Located at bridge bents.

48" DRILLED SHAFT
Located at bridge bents.

54" DRILLED SHAFT
Located at bridge bents.



60" DRILLED SHAFT
Located at bridge bents.



ABUTMENTS & WINGWALLS

INTERIOR BENTS DRILLED SHAFT DIA EQUAL TO COLUMN DIA

INTERIOR BENTS DRILLED SHAFT DIA GREATER THAN COLUMN DIA

SHORT INTERIOR BENT DRILLED SHAFT DETAIL

DRILLED SHAFT ELEVATION DETAILS

- ① Refer to drilled shaft section for spiral size and pitch.
- ② Provide one and half flat turns top and bottom.
- ③ Min extensions into support element
#6 Bars = 1'-11"
#7 Bars = 2'-0"
#9 Bars = 2'-3"
- ④ Min lap with column reinforcement
#7 Bars = 3'-3"
#9 Bars = 4'-3"
#11 Bars = 5'-3"
- ⑤ Min extensions into support element
#6 Bars = 1'-11"
#7 Bars = 2'-3"
#9 Bars = 2'-9"
- ⑥ Refer to bridge details for applicable locations. Drilled shafts may extend to the bottom of bent caps for "H" heights of 6 ft and less (as shown on the Bridge Layout), if approved. This option can only be used when the drilled shaft diameter equals the column diameter. Obtain approval of the forming method above the ground line prior to construction. No adjustments in payment will be made if this option is used.
- ⑦ 1'-0" Min, unless shown otherwise on plans.
2'-0" Min at water crossings, unless shown otherwise on plans.
- ⑧ Projecting reinforcing is to be included in unit price bid for drilled shafts.
- ⑨ Dowels are to be included in unit price bid for drilled shafts.

CONSTRUCTION NOTES:

See Bridge Layout and "Foundation Notes" or "Table of Foundation Quantities", if provided, for drilled shaft size, design load, and length required.

Use these drilled shaft details unless shown otherwise on bridge plans.

Refer to bridge details for anticipated locations of drilled shaft casing.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.

These details have been modified for the Houston District to facilitate slurry displacement method of drilled shaft installation.

The details shown on this sheet are only applicable for multi-column or multi-drilled shaft bridge abutments and bents. These details are not applicable for retaining walls, sound walls, and sign structures. Drilled shaft details shown on this sheet maybe referenced by engineer for footings on drilled shafts. Refer elsewhere in plans for footing details.

Drilled shaft details for drilled shafts exceeding 60" diameter are shown elsewhere in plans. Drilled shafts exceeding 30" diameter shall have a minimum of 5" clear cover and 1% minimum vertical reinforcing steel.

MATERIAL NOTES:

Provide Class SS Concrete ($f'c = 3,600$ psi), unless shown otherwise.

Provide Grade 60 reinforcing steel, unless shown otherwise.

Galvanize reinforcing if shown elsewhere in the plans.

Provide bar laps for drilled shaft reinforcing, where required, as follows:
Uncoated or galvanized (#6) ~ 2'-10"
Uncoated or galvanized (#7) ~ 3'-3"
Uncoated or galvanized (#9) ~ 4'-3"
Uncoated or galvanized (#11) ~ 5'-3"

Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bar dimensions shown are out-to-out of bar.



STANDARD BRIDGE DRILLED SHAFT DETAILS HOUSTON DISTRICT

HOU-BDS-22

FILE: STDJ14.dgn	DN: MEC	CK: YL	DW: MEC	CK: YL
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DIST	COUNTY		SHEET NO.	

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