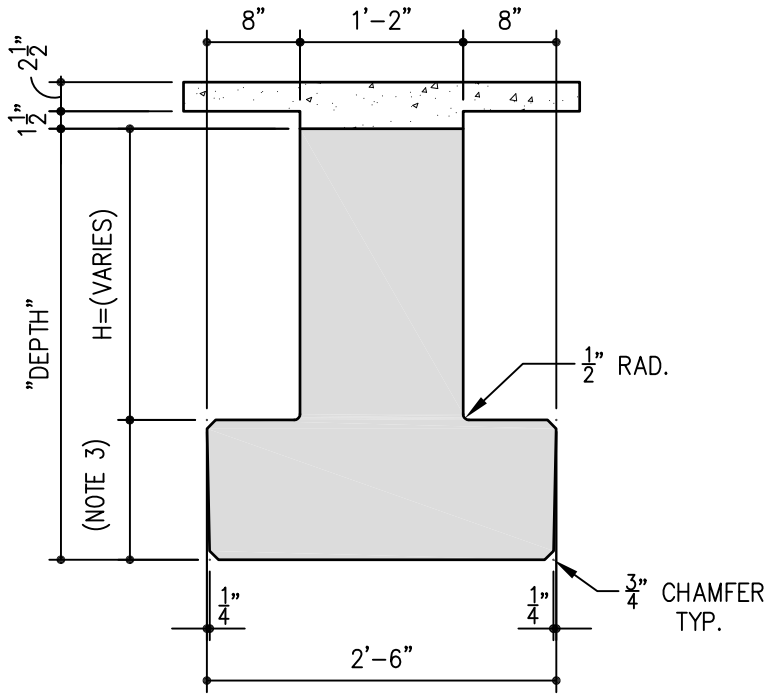
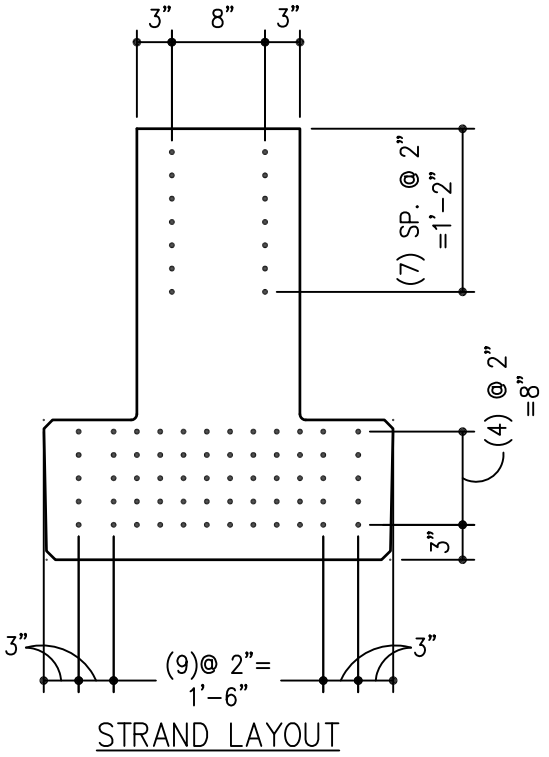
30" INVERTED T-BEAM
30IT24, 30IT30, 30IT36 & 30IT44





STRAND LAYOUT

NOTES:

1. LOAD/SPAN CAPACITY: COMMON SPANS SUPPORTING STANDARD PRODUCTS RANGE FROM 20FT TO 40FT. GREATER SPANS CAN BE ACHIEVED WITH SPECIAL DESIGN CONSIDERATIONS.

2. SHORING: PRODUCT IS TYPICALLY NOT SHORED DURING CONSTRUCTION. SHORING MAY BE USED TO ACHIEVE SPECIFIC DESIGN REQUIREMENTS, OR PROVIDE CONSTRUCTION STABILITY.

3. LEDGE HEIGHTS: 12" IS USED AS THE STANDARD DIMENSION. ALTERNATE HEIGHTS ARE AVAILABLE FOR SPECIFIC APPLICATIONS SUCH AS INCREASED BEAM CAPACITY.

4. STEM HEIGHTS: TOP OF BEAM IS HELD NOMINALLY 1½" BELOW T.O. FLOOR FRAMING PRODUCT (DT ETC.).
H=STEM HEIGHT
11"@ 30IT24, 17"@ 30IT30, 23"@ 30IT36 & 31"@ 30IT44

5. SECTION PROPERTIES SHOWN RELATE TO OUR STANDARD DOUBLE TEE SECTIONS. OTHER PRODUCT LINES CAN BE ACCOMMODATED BY ADJUSTING THE STEM HEIGHT.

6. STANDARD REINFORCING: SEE INVERTED TEE BEAM/ L-BEAM REINFORCING DETAILS.

SECTION PROPERTIES

STANDARD UNIT	A in^2	I in^4	Y_b in	Y_t in	S_b in^3	S_t in^3	Vol/ Surf.	WT plf
30IT24	510	20137	9.5	13.5	2132	1486	4.92	549
30IT30	594	40176	11.81	17.19	3413	2332	5.13	639
30IT36	678	70568	14.31	20.69	4948	3403	5.31	730
30IT44	790	130036	17.81	25.19	7325	5150	5.5	850

COMPOSITE UNIT	A in^2	I in^4	Y_b in	S_b in^3	Y_t (PC) in	Y_t (TOP) in	S_t (PC) in^3	S_t (TOP) in^3
30IT24	635	45408	12.5	3633	10.5	14.5	4324	4042
30IT30	719	79341	15.1	5260	13.9	17.9	5702	5717
30IT36	803	126020	17.8	7097	17.2	21.2	7309	7659
30IT44	915	210789	21.4	9843	21.6	25.6	9765	10636

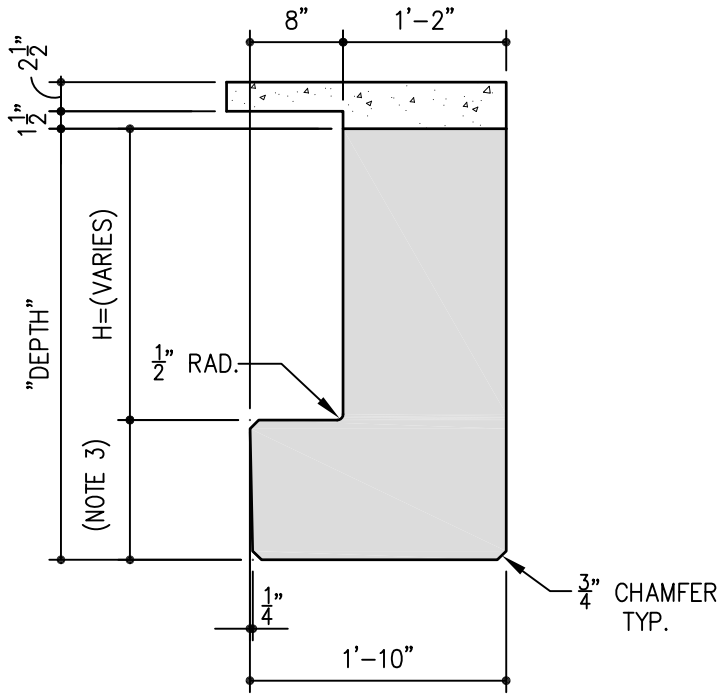
ISSUED:

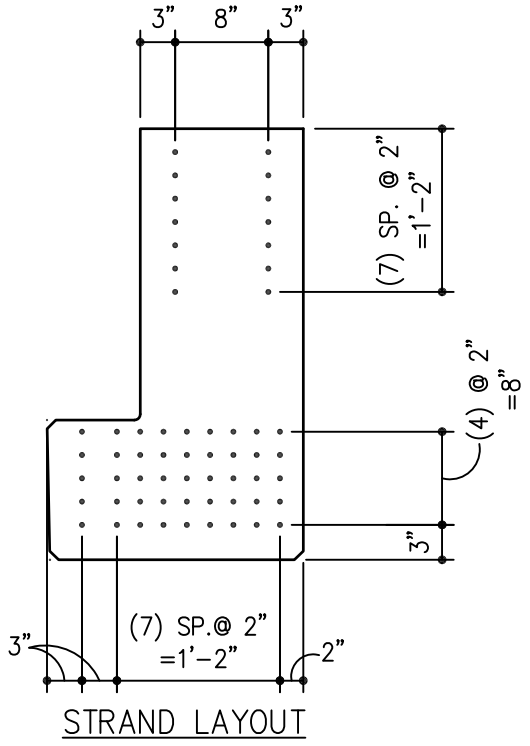
REVISED:

BEAMS AND SOFFITS

SHEET:
30ITB

22" L-BEAM
22LB24, 22LB30, 30LB36 & 30LB44





STRAND LAYOUT

NOTES:

1. LOAD/SPAN CAPACITY: COMMON SPANS SUPPORTING STANDARD PRODUCTS RANGE FROM 20FT TO 40FT. GREATER SPANS CAN BE ACHIEVED WITH SPECIAL DESIGN CONSIDERATIONS.

2. SHORING: PRODUCT IS TYPICALLY NOT SHORED DURING CONSTRUCTION. SHORING MAY BE USED TO ACHIEVE SPECIFIC DESIGN REQUIREMENTS, OR PROVIDE CONSTRUCTION STABILITY.

3. LEDGE HEIGHTS: 12" IS USED AS THE STANDARD DIMENSION. ALTERNATE HEIGHTS ARE AVAILABLE FOR SPECIFIC APPLICATIONS SUCH AS INCREASED BEAM CAPACITY.

4. STEM HEIGHTS: TOP OF BEAM IS HELD NOMINALLY 1½" BELOW T.O. FLOOR FRAMING PRODUCT (DT ETC.).
H=STEM HEIGHT
11"@ 22LB24, 17"@ 22LB30, 23"@ 22LB36 & 31"@ 22LB44

5. SECTION PROPERTIES SHOWN RELATE TO OUR STANDARD DOUBLE TEE SECTIONS. OTHER PRODUCT LINES CAN BE ACCOMMODATED BY ADJUSTING THE STEM HEIGHT.

6. STANDARD REINFORCING: SEE INVERTED TEE BEAM/ L-BEAM REINFORCING DETAILS.

SECTION PROPERTIES

STANDARD UNIT	A in^2	I in^4	Y_b in	Y_t in	S_b in^3	S_t in^3	Vol/ Surf.	WT plf
22LB24	416	17584	10.25	12.75	1718	1378	4.70	447
22LB30	500	35215	12.94	16.06	2735	2184	4.98	538
22LB36	584	61789	15.69	19.31	3957	3188	5.19	628
22LB44	696	113802	19.44	23.56	5876	4816	5.42	749

COMPOSITE UNIT	A in^2	I in^4	Y_b in	S_b in^3	Y_t (PC) in	Y_t (TOP) in	S_t (PC) in^3	S_t (TOP) in^3
22LB24	500	33356	12.7	2623	10.3	14.3	3244	3015
22LB30	584	59402	15.5	3839	13.5	17.5	4391	4375
22LB36	668	95908	18.3	5244	16.7	20.7	5739	5978
22LB44	780	163499	22.1	7397	20.9	24.9	7824	8478

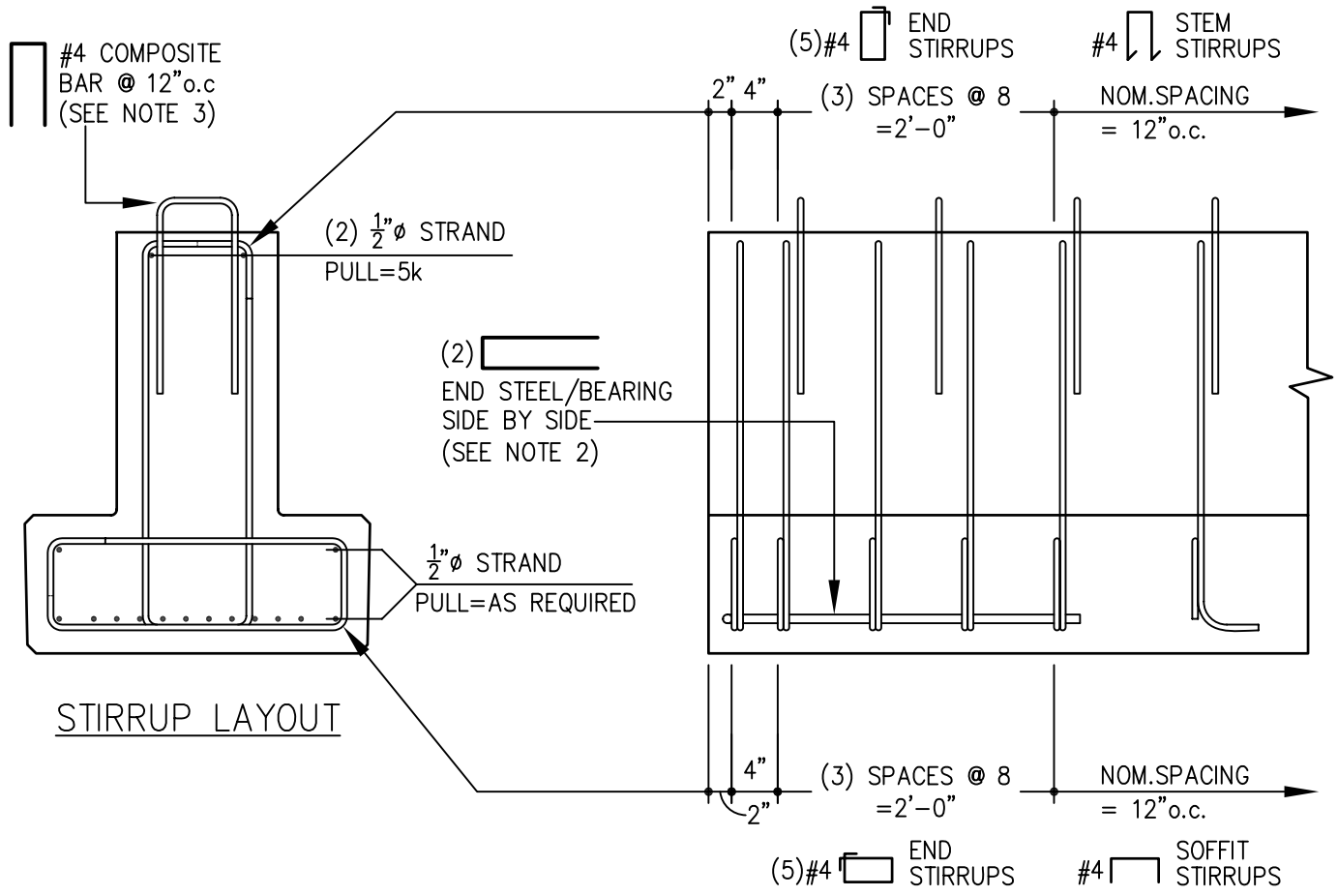
ISSUED:

REVISED:

BEAMS AND SOFFITS

SHEET: 22LB

INVERTED T-BEAM / L-BEAM REINFORCING DETAILS



NOTES:

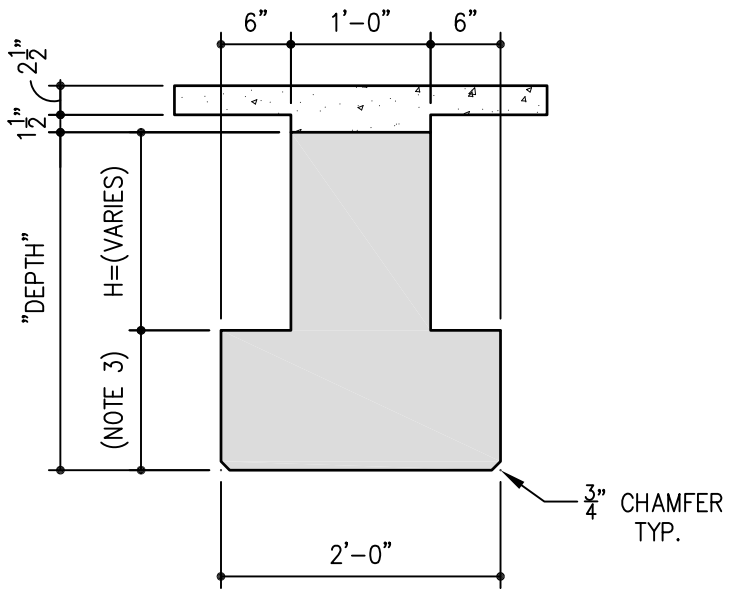
1. LONGITUDINAL WEB STEEL AND SEISMIC STIRRUPS ARE GENERALLY NOT REQUIRED, UNLESS ADDRESSING A SPECIFIC DESIGN NEED SUCH AS TORSION.

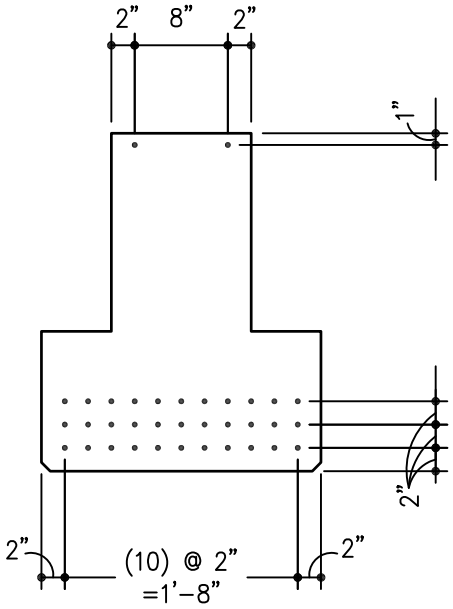
2. STANDARD END STEEL AND/OR BEARING PLATES PROVIDED AS REQUIRED BY DESIGN. MILD STEEL HAIRPINS ARE TYPICALLY USED IF STRESSES DO NOT WARRANT THE USE OF MANUFACTURED BEARING PLATES.

3. STRAIGHT "POKE-IN" BARS MAY BE USED IN LIEU OF HAIRPINS. BEND DOWN TO TOPPING SLAB ONCE PRECAST FLOOR SYSTEM IS SET.

ISSUED:	BEAMS AND SOFFITS	SHEET: ITR
REVISED:		

24" INVERTED T-BEAM (Lite)
24IT20, 24IT24, 24IT30 & 24IT36





STRAND LAYOUT

NOTES:

1. LOAD/SPAN CAPACITY: COMMON SPANS SUPPORTING STANDARD PRODUCTS RANGE FROM 20FT TO 30FT. GREATER SPANS CAN BE ACHIEVED WITH SPECIAL DESIGN CONSIDERATIONS.

2. REFER TO 30ITB FOR STANDARD NOTES & REINFORCING.

3. ITB "Lite" SECTIONS CAN BE EFFECTIVE WHERE LOAD/SPAN COMBINATIONS FOR THE BEAM AND/OR SUPPORTED FLOOR SYSTEM ARE APPROPRIATE. EXAMPLES WOULD BE SHALLOWER "TEE" SECTIONS OR DYNACORE FLOOR PRODUCTS.

4. STEM HEIGHTS: TOP OF BEAM IS HELD NOMINALLY 1½" BELOW T.O. FLOOR FRAMING PRODUCT (DT ETC.).
H=STEM HEIGHT
7"@ 24IT20, 11"@ 24IT24, 17"@ 24IT30 & 23"@ 24IT36

5. SECTION PROPERTIES SHOWN RELATE TO OUR STANDARD DOUBLE TEE SECTIONS. OTHER PRODUCT LINES CAN BE ACCOMMODATED BY ADJUSTING THE STEM HEIGHT.

6. STANDARD REINFORCING: SEE INVERTED TEE BEAM/ L–BEAM REINFORCING DETAILS.

SECTION PROPERTIES

STANDARD UNIT	A in^2	I in^4	Y_b in	Y_t in	S_b in^3	S_t in^3	Vol/ Surf.	WT plf
24IT20	371	9668	8.12	10.88	1187	891	4.40	399
24IT24	419	16758	9.63	13.37	1743	1252	4.54	451
24IT30	491	33476	12.0	17.0	2787	1971	4.71	528
24IT36	563	58785	14.56	20.44	4036	2877	4.84	606

COMPOSITE UNIT	A in^2	I in^4	Y_b in	S_b in^3	Y_t (PC) in	Y_t (TOP) in	S_t (PC) in^3	S_t (TOP) in^3
24IT20	487	25418	11.3	2251	7.7	11.7	3298	2803
24IT24	535	39608	13.0	3042	10.0	14.0	3970	3658
24IT30	607	68914	15.7	4391	13.3	17.3	5180	5142
24IT36	679	109039	18.4	5913	16.6	20.6	6584	6847

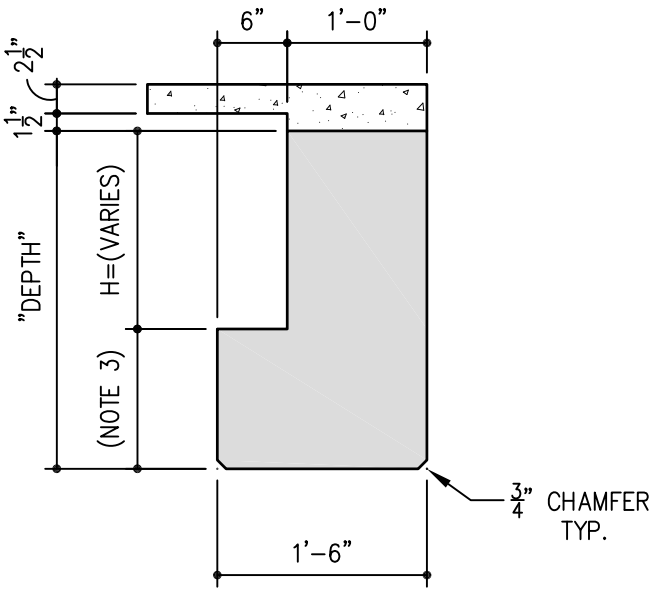
ISSUED:

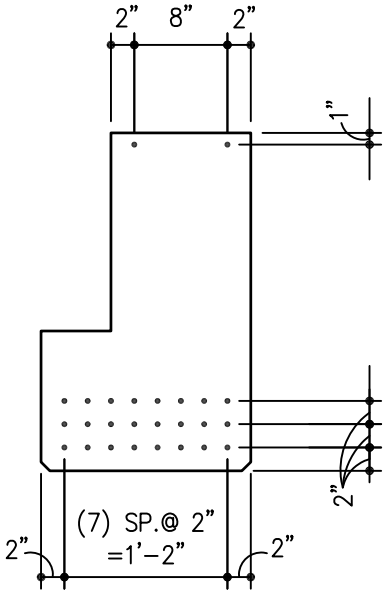
REVISED:

BEAMS AND SOFFITS

SHEET: **24ITB**

18" L-BEAM (Lite)
18LB20, 18LB24, 18LB30 &18LB36





STRAND LAYOUT

NOTES:

1. LOAD/SPAN CAPACITY: COMMON SPANS SUPPORTING STANDARD PRODUCTS RANGE FROM 20FT TO 30FT. GREATER SPANS CAN BE ACHIEVED WITH SPECIAL DESIGN CONSIDERATIONS.

2. REFER TO 22LB FOR STANDARD NOTES & REINFORCING.

3. LB "Lite" SECTIONS CAN BE EFFECTIVE WHERE LOAD/SPAN COMBINATIONS FOR THE BEAM AND/OR SUPPORTED FLOOR SYSTEM ARE APPROPRIATE. EXAMPLES WOULD BE SHALLOWER "TEE" SECTIONS OR DYNACORE FLOOR PRODUCTS.

4. STEM HEIGHTS: TOP OF BEAM IS HELD NOMINALLY 1½" BELOW T.O. FLOOR FRAMING PRODUCT (DT ETC.).
H=STEM HEIGHT
7"@ 18LB20, 11"@ 18LB24, 17"@ 18LB30 & 23"@ 18LB36

5. SECTION PROPERTIES SHOWN RELATE TO OUR STANDARD DOUBLE TEE SECTIONS. OTHER PRODUCT LINES CAN BE ACCOMMODATED BY ADJUSTING THE STEM HEIGHT.

6. STANDARD REINFORCING: SEE INVERTED TEE BEAM/ L–BEAM REINFORCING DETAILS.

SECTION PROPERTIES

STANDARD UNIT	A in^2	I in^4	Y_b in	Y_t in	S_b in^3	S_t in^3	Vol/ Surf.	WT plf
18LB20	299	8393	8.68	10.32	969	812	4.11	322
18LB24	347	14758	10.38	12.62	1424	1168	4.30	374
18LB30	419	29563	13.0	16.0	2267	1853	4.52	451
18LB36	491	51868	15.81	19.19	3279	2704	4.69	529

COMPOSITE UNIT	A in^2	I in^4	Y_b in	S_b in^3	Y_t (PC) in	Y_t (TOP) in	S_t (PC) in^3	S_t (TOP) in^3
18LB20	376	18280	11.2	1628	7.8	11.8	2352	2005
18LB24	424	28899	13.1	2214	9.9	13.9	2905	2675
18LB30	496	51268	15.9	3235	13.1	17.1	3899	3859
18LB36	568	82533	18.7	4414	16.3	20.3	5063	5249

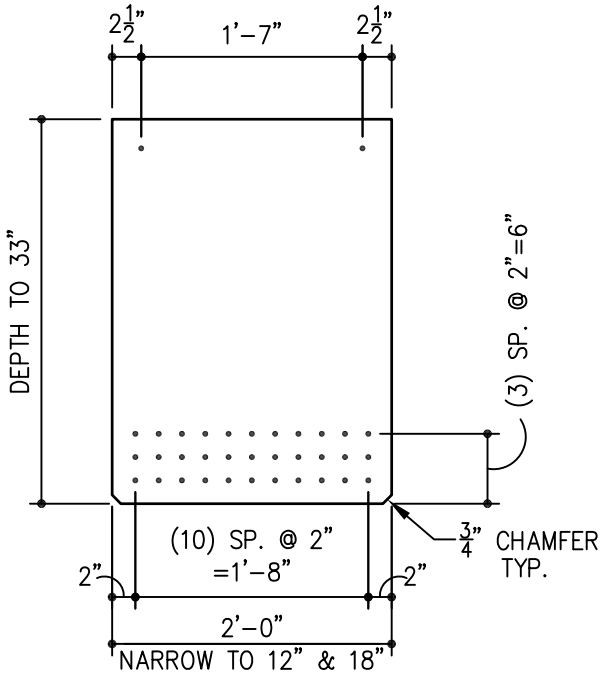
ISSUED:

REVISED:

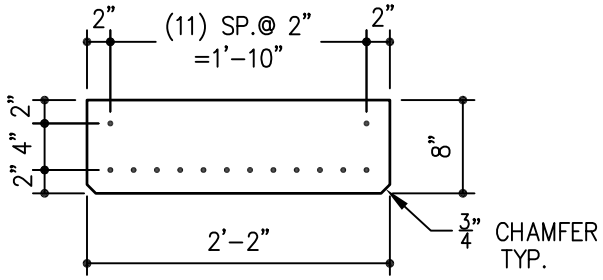
BEAMS AND SOFFITS

SHEET: 18LB

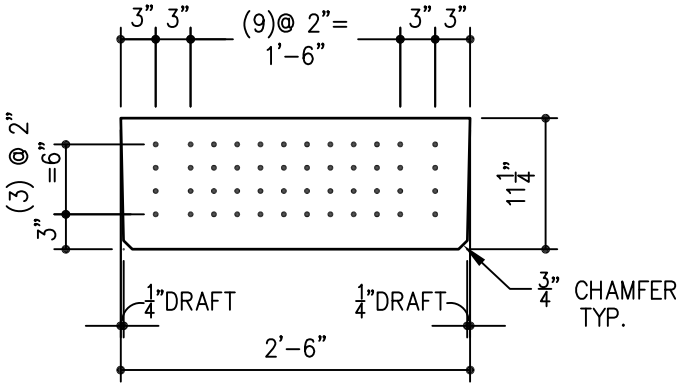
RECTANGULAR & SOFFIT BEAMS



STANDARD R–BEAMS



26RB8 SOFFIT



30RB12 SOFFIT

NOTES:

1. LOAD/SPAN CAPACITY: RECTANGULAR BEAMS & SOFFITS ARE AVAILABLE IN VARYING WIDTHS AND DEPTHS. TYPICAL BAY FRAMING CAN EASILY BE ACCOMMODATED WITH STANDARD SIZE SECTIONS.

2. AVAILABLE SECTIONS: THE SECTIONS DETAILED ABOVE REPRESENT READILY AVAILABLE FORMS WHICH WILL GENERALLY PROVIDE THE MOST ECONOMICAL DESIGN SOLUTION. CONSULT GPRM Prestress FOR SPECIAL DEPTH, WIDTH AND SPAN CONDITIONS.

3. SHORING: SHALLOW SOFFIT BEAM TYPE SECTIONS WILL OFTEN REQUIRE SHORING. SUBSTITUTING AN INVERTED T SECTION MAY REDUCE THE SHORING DEMANDS.

4. SOFFIT BEAMS DOWN TO 6" THICK MAY BE CAST FROM STANDARD SOFFIT FORMS.

ISSUED:	**BEAMS AND SOFFITS**	SHEET: **RB**
REVISED:		