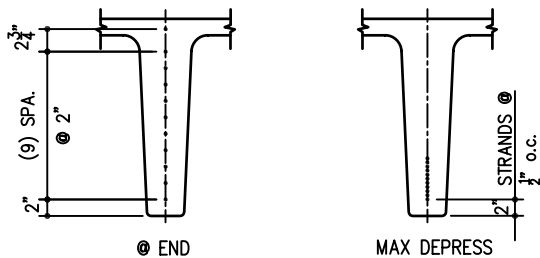


NOTES:

1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)

2. STRAND LOCATIONS: SECTIONS SHOULD TYPICALLY BE DESIGNED WITH DEPRESSED STRAND FOR ECONOMY AND TO HELP REDUCE REQUIRED RELEASE STRENGTHS.

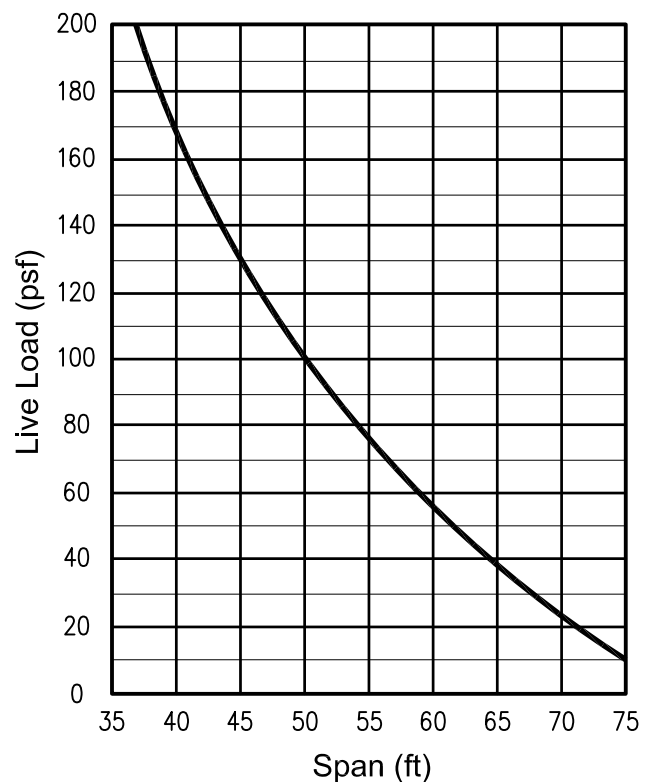


3. STANDARD REINFORCING: REINFORCING GENERALLY CONSISTING OF SPECIALTY MESH IS USED IN DOUBLE TEE PRODUCTION. (SEE 8DT REINFORCING DETAILS)

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	S _b in ³	S _t in ³	WT plf	WT psf
STANDARD UNIT	436	23468	16.75	7.25	1407	3206	469	59
COMPOSITE UNIT	630	33485	19.35	4.65	1731	7195	727	91

LOAD / SPAN TABLE



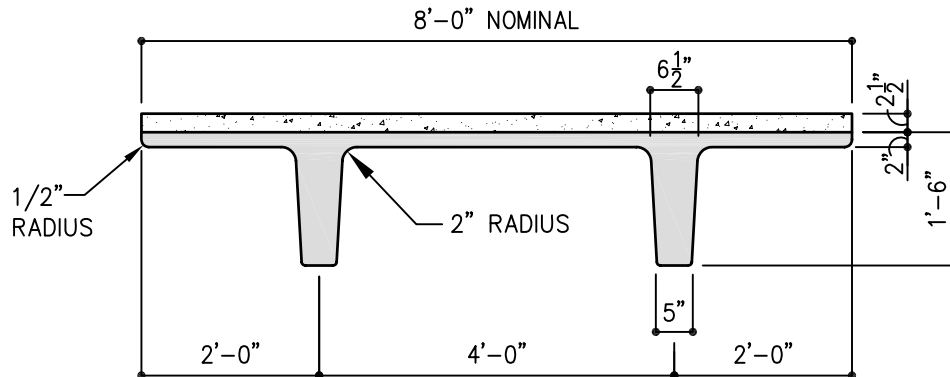
ISSUED:

REVISED:

HAWAII DOUBLE TEE

SHEET:

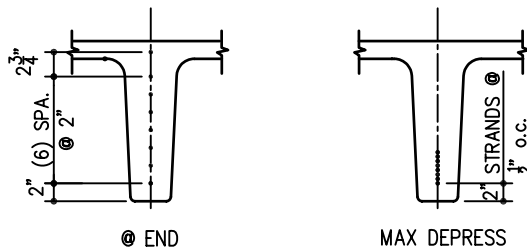
8DT24



NOTES:

1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)

2. STRAND LOCATIONS: SECTIONS SHOULD TYPICALLY BE DESIGNED WITH DEPRESSED STRAND FOR ECONOMY AND TO HELP REDUCE REQUIRED RELEASE STRENGTHS.

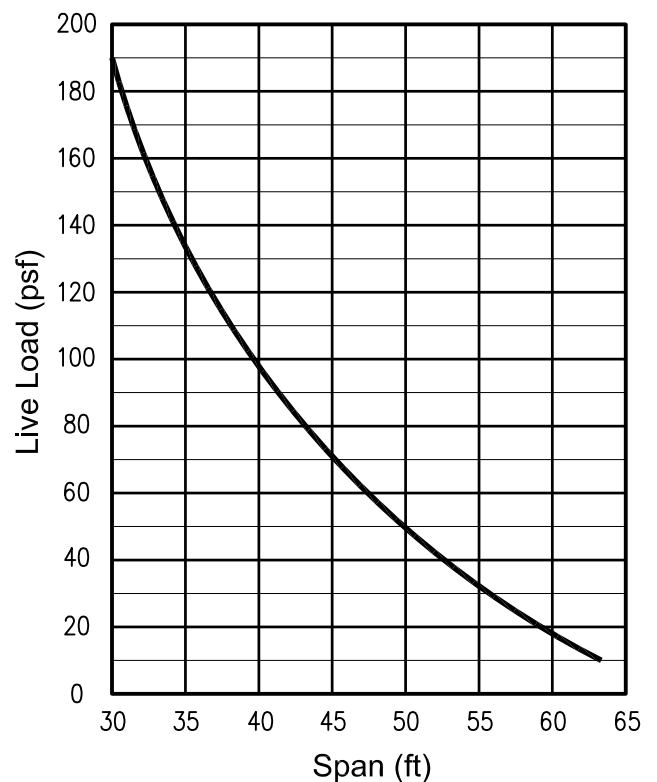


3. STANDARD REINFORCING: REINFORCING GENERALLY CONSISTING OF SPECIALTY MESH IS USED IN DOUBLE TEE PRODUCTION. (SEE 8DT REINFORCING DETAILS)

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	S _b in ³	S _t in ³	WT plf	WT psf
STANDARD UNIT	379	11001	12.77	5.23	862	2102	408	51
COMPOSITE UNIT	572	16519	14.99	3.01	1102	5483	665	83

LOAD / SPAN TABLE



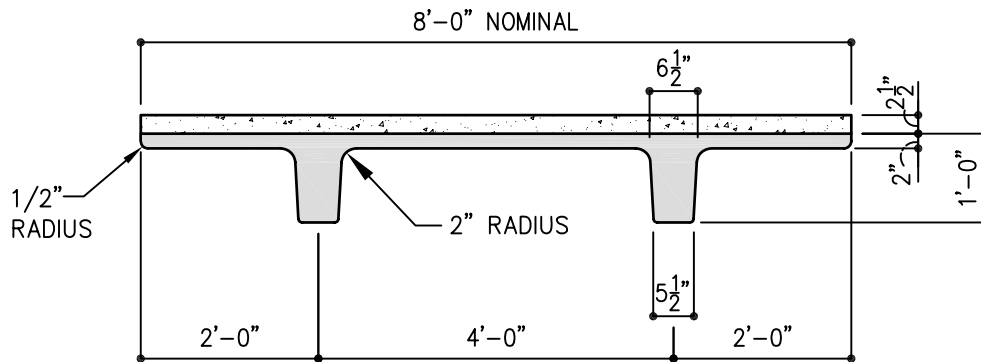
ISSUED:

REVISED:

HAWAII DOUBLE TEE

SHEET:

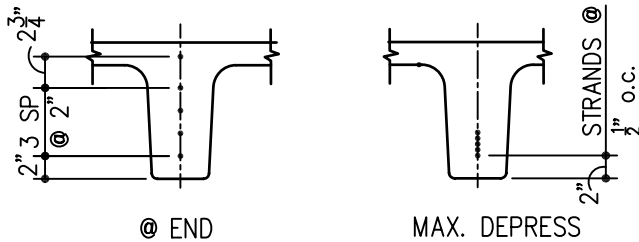
8DT18



NOTES:

1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)

2. STRAND LOCATIONS: SECTIONS SHOULD TYPICALLY BE DESIGNED WITH DEPRESSED STRAND FOR ECONOMY AND TO HELP REDUCE REQUIRED RELEASE STRENGTHS.



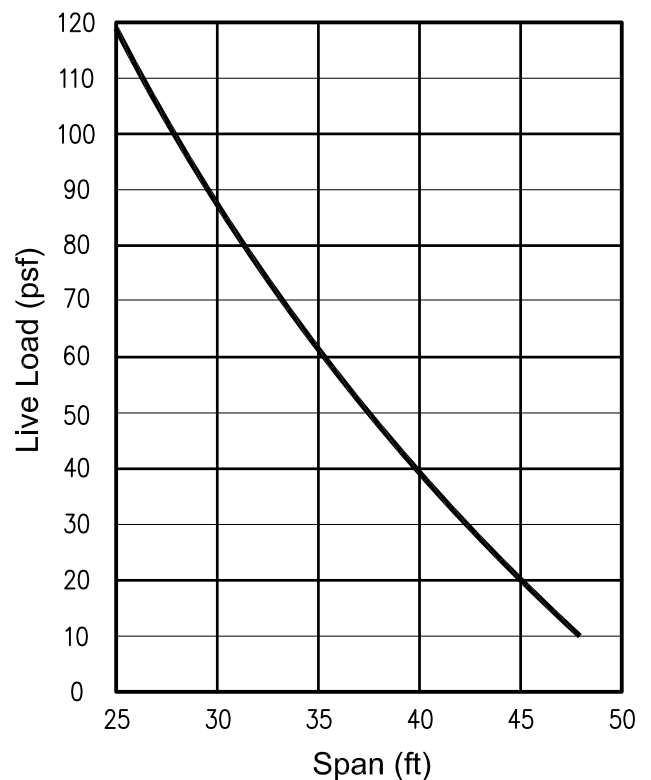
3. STANDARD REINFORCING: REINFORCING GENERALLY CONSISTING OF SPECIALTY MESH IS USED IN DOUBLE TEE PRODUCTION. (SEE 8DT REINFORCING DETAILS)

4. SHEAR REINFORCING: SHEAR REINFORCING MAY GOVERN ON SHORTER SPANS.

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	S _b in ³	S _t in ³	WT plf	WT psf
STANDARD UNIT	315	3598	8.75	3.25	411	1106	339	43
COMPOSITE UNIT	508	6143	10.48	1.52	586	4050	597	75

LOAD / SPAN TABLE



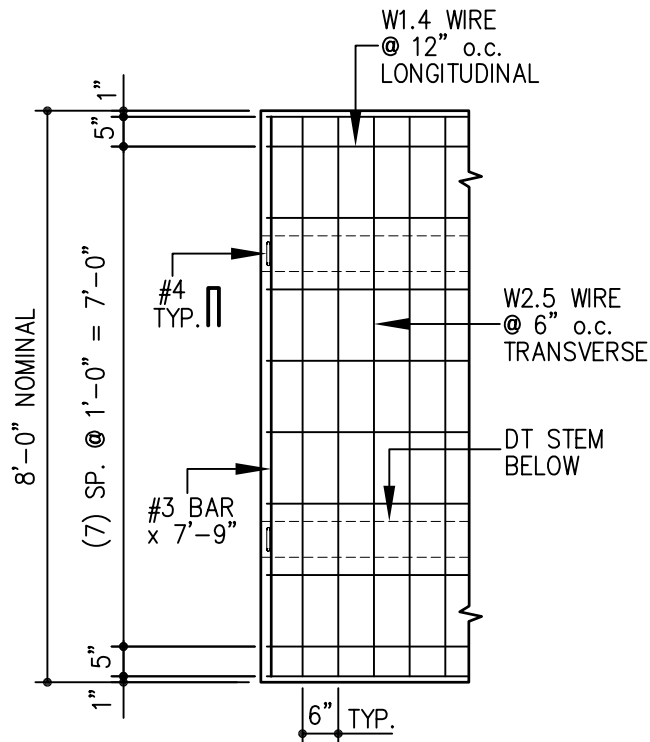
ISSUED:

REVISED:

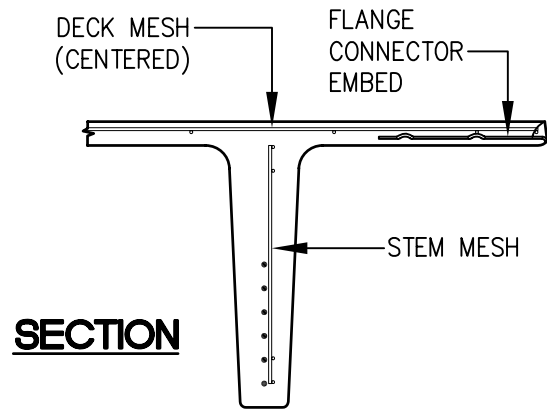
HAWAII DOUBLE TEE

SHEET:

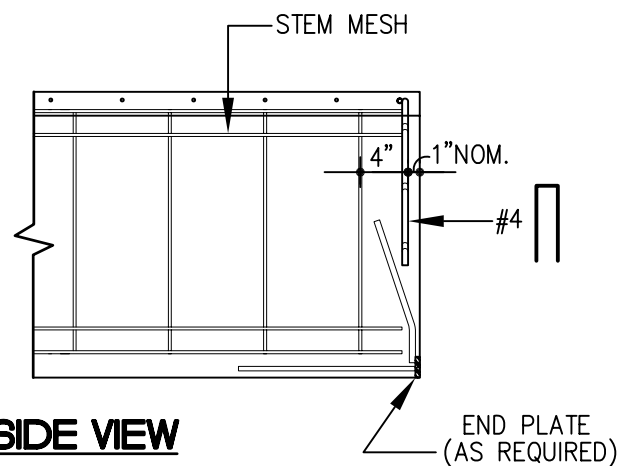
8DT12



PLAN VIEW



SECTION



SIDE VIEW

NOTES:

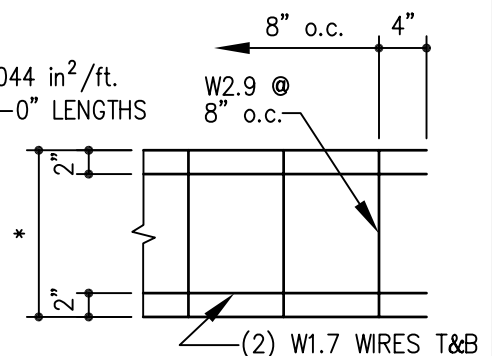
1. REINFORCING DETAILS ARE SHOWN FOR GENERAL DESIGN CONDITIONS TYPICALLY CONSISTING OF UNIFORM DISTRIBUTED LOADS. DESIGN WILL BE CHECKED FOR PROJECT SPECIFIC REQUIREMENTS.
2. DOUBLE TEE MAY REQUIRE SHEAR MESH AT END REGIONS ONLY. CONSULT GPRM Prestress FOR SPECIFIC DESIGN INFORMATION.
3. HIGHER SHEAR LOADS CAN BE ACCOMMODATED UTILIZING (2) LAYERS OF STANDARD STEM MESH, PROVIDING A CUSTOM MESH OR INTRODUCING MILD STEEL REINFORCING.
4. FLANGE CONNECTORS ARE NOMINALLY SPACED AT 8'-0" o.c. AND ASSIST WITH ERECTION STABILITY, ALIGNMENT AND LOAD TRANSFER. THEY ARE GENERALLY NOT INCLUDED IN THE FINAL DESIGN ANALYSIS.
5. STANDARD END CONFINEMENT/BEARING PLATES ARE PROVIDED AS NEEDED. SPECIAL CONDITIONS SUCH AS DAPS & CAST-IN ENDS ARE ADDRESSED WITH CUSTOM SOLUTIONS.

STANDARD MESH:

DECK MESH
 (SEE PLAN VIEW DETAIL ABOVE)
 12 x 6 - W1.4 x W2.5
 SHEET SIZE= 7'-10" x 20'-0"
 $F_y = 65 \text{ ksi}$
 LONGITUDINAL $A_s = 0.014 \text{ in}^2/\text{ft.}$
 TRANSVERSE $A_s = 0.049 \text{ in}^2/\text{ft.}$

STEM MESH
 $F_y = 65 \text{ ksi}$
 $A_s \text{ PROVIDED} = 0.044 \text{ in}^2/\text{ft.}$
 SHEET SIZE= 10'-0" LENGTHS

- * = 20" -DT24
- = 14" -DT18
- = 8" -DT12



ISSUED:

REVISED:

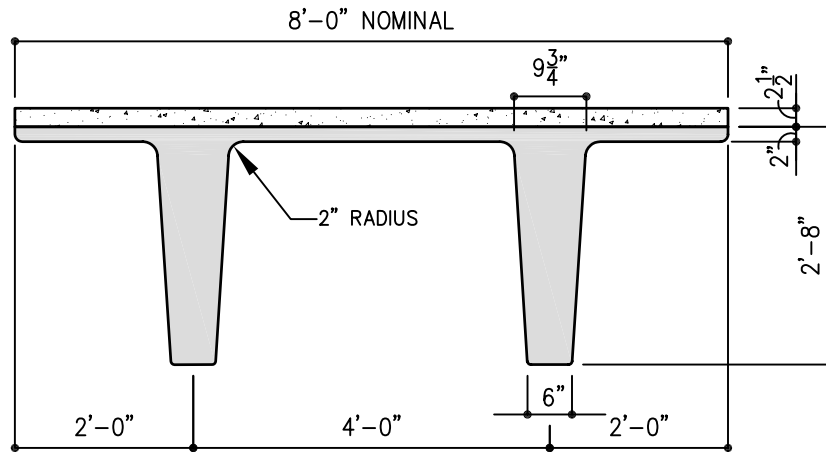
HAWAII DOUBLE TEE

SHEET:

8DTR



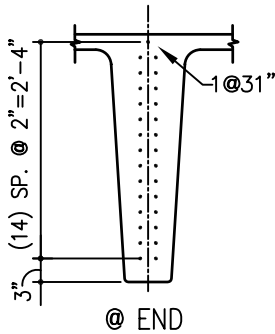
8 FT. DOUBLE TEE 8DT32



NOTES:

1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)

2. STRAND LOCATIONS: 8DT32 SECTION TYPICALLY USES A STRAIGHT STRAND PROFILE. A SINGLE ROW OF CENTERED STRANDS CAN ALSO BE USED. DEBONDING OF STRAND WILL COMMONLY BE REQUIRED TO REDUCE STRESSES.

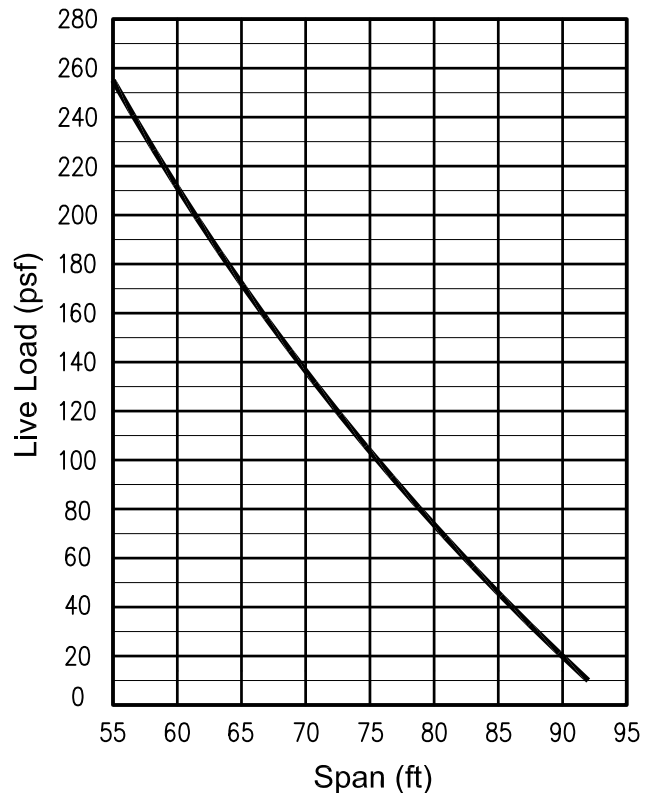


3. STANDARD REINFORCING: DECK MESH PER STANDARD 8DT PRODUCTS IS TYPICALLY USED (SEE 8DT REINFORCING SHEET). STEM REINFORCING IS ADDRESSED ON A CUSTOM BASIS TO REFLECT PROJECT REQUIREMENTS. CONSULT GPRM Prestress.

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	S _b in ³	S _t in ³	WT plf	WT psf
STANDARD UNIT	665	64775	20.47	11.53	3164	5618	716	90
COMPOSITE UNIT	860	89595	23.38	8.62	3832	10394	974	122

LOAD / SPAN TABLE



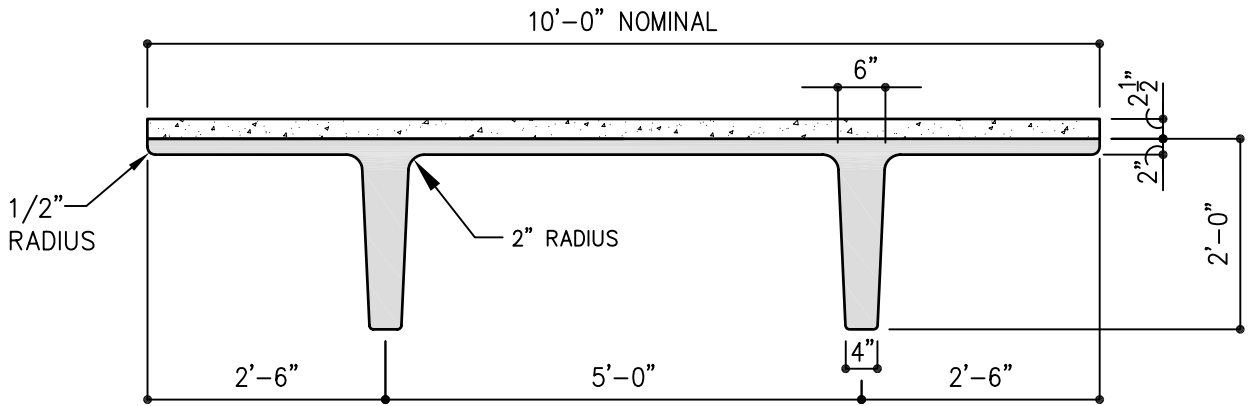
ISSUED:

REVISED:

HAWAII DOUBLE TEE

SHEET:

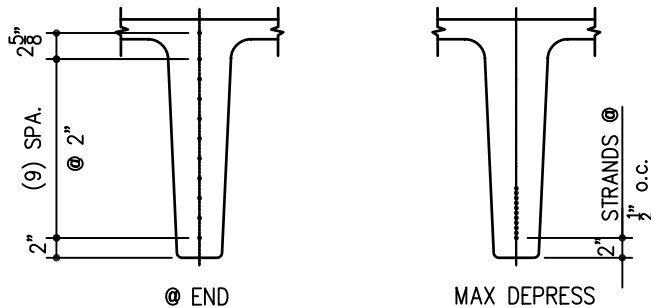
8DT32



NOTES:

1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)

2. STRAND LOCATIONS: SECTIONS SHOULD TYPICALLY BE DESIGNED WITH DEPRESSED STRAND FOR ECONOMY AND TO HELP REDUCE REQUIRED RELEASE STRENGTHS.

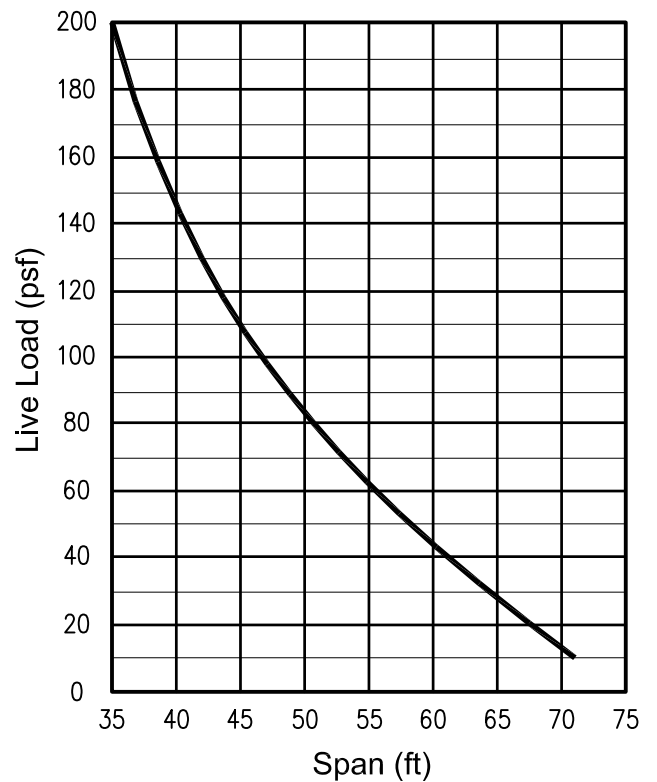


3. STANDARD REINFORCING: REINFORCING GENERALLY CONSISTING OF SPECIALTY MESH IS USED IN DOUBLE TEE PRODUCTION. (SEE 10DT REINFORCING DETAILS)

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	S _b in ³	S _t in ³	WT plf	WT psf
STANDARD UNIT	462	23405	17.61	6.39	1329	3664	497	50
COMPOSITE UNIT	705	32859	20.27	3.73	1621	8799	820	82

LOAD / SPAN TABLE



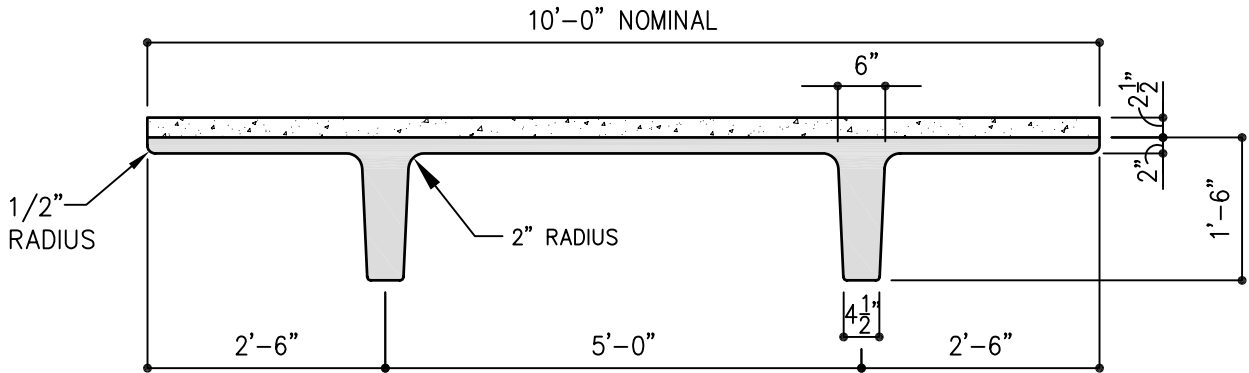
ISSUED:

REVISED:

HAWAII DOUBLE TEE

SHEET:

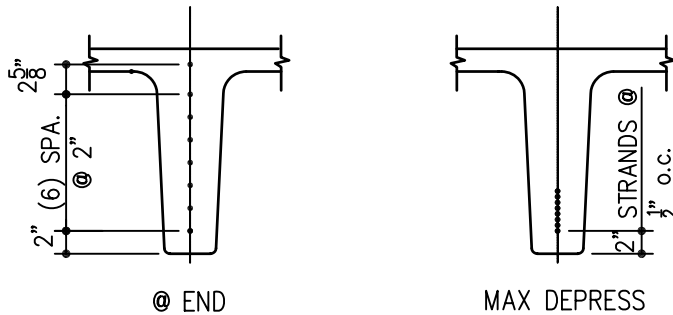
10DT24



NOTES:

1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)

2. STRAND LOCATIONS: SECTIONS SHOULD TYPICALLY BE DESIGNED WITH DEPRESSED STRAND FOR ECONOMY AND TO HELP REDUCE REQUIRED RELEASE STRENGTHS.

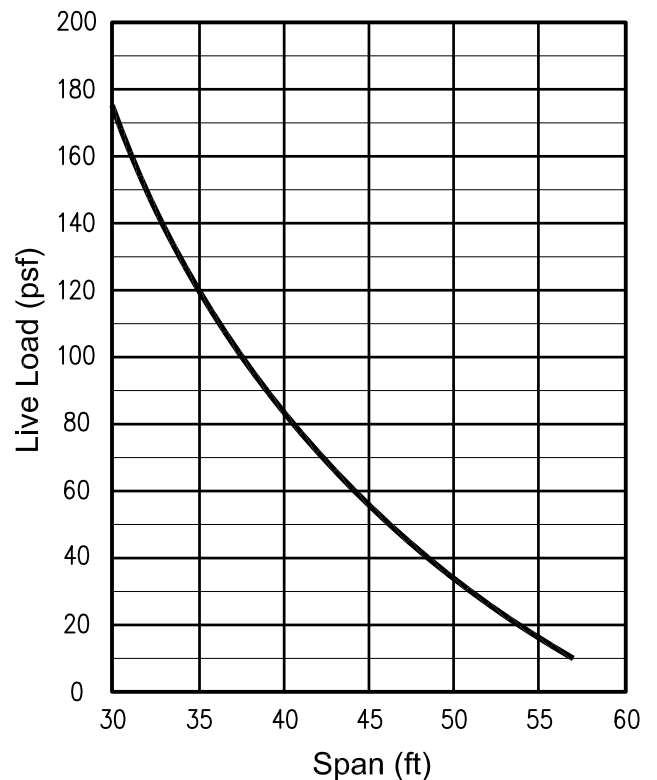


3. STANDARD REINFORCING: REINFORCING GENERALLY CONSISTING OF SPECIALTY MESH IS USED IN DOUBLE TEE PRODUCTION. (SEE 10DT REINFORCING DETAILS)

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	S _b in ³	S _t in ³	WT plf	WT psf
STANDARD UNIT	410	10981	13.45	4.55	816	2414	442	44
COMPOSITE UNIT	653	16256	15.63	2.37	1040	6849	765	77

LOAD / SPAN TABLE



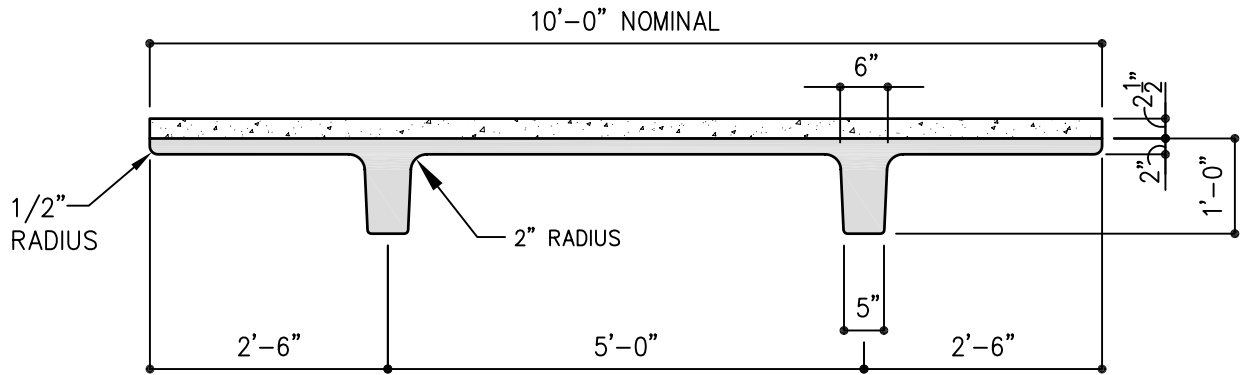
ISSUED:

REVISED:

HAWAII DOUBLE TEE

SHEET:

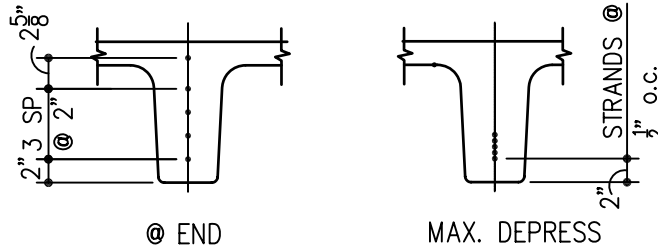
10DT18



NOTES:

1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)

2. STRAND LOCATIONS: SECTIONS SHOULD TYPICALLY BE DESIGNED WITH DEPRESSED STRAND FOR ECONOMY AND TO HELP REDUCE REQUIRED RELEASE STRENGTHS.



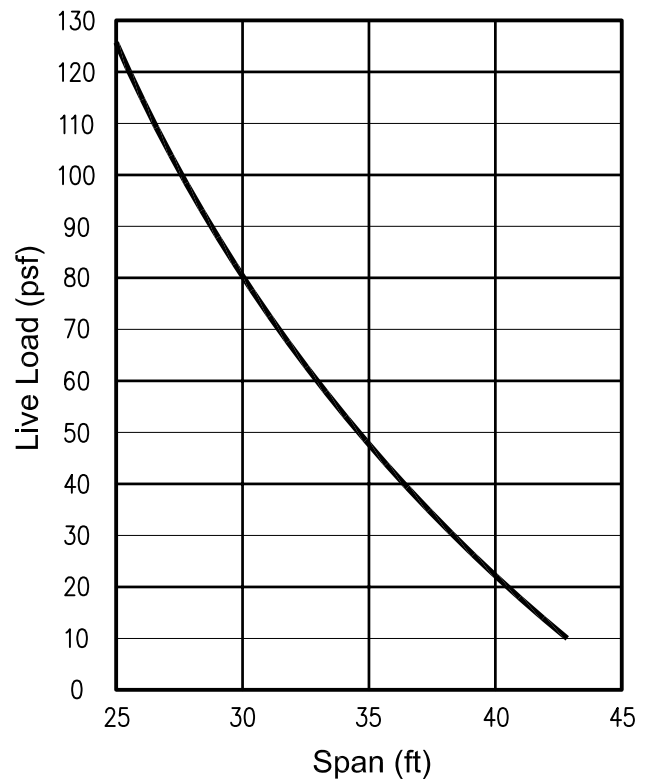
3. STANDARD REINFORCING: REINFORCING GENERALLY CONSISTING OF SPECIALTY MESH IS USED IN DOUBLE TEE PRODUCTION. (SEE 10DT REINFORCING DETAILS)

4. SHEAR REINFORCING: SHEAR REINFORCING MAY GOVERN ON SHORTER SPANS.

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	S _b in ³	S _t in ³	WT plf	WT psf
STANDARD UNIT	353	3574	9.16	2.84	390	1259	379	38
COMPOSITE UNIT	595	6110	10.85	1.15	563	5290	702	70

LOAD / SPAN TABLE



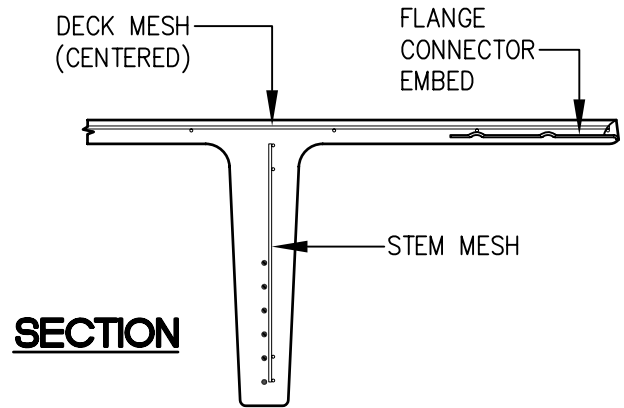
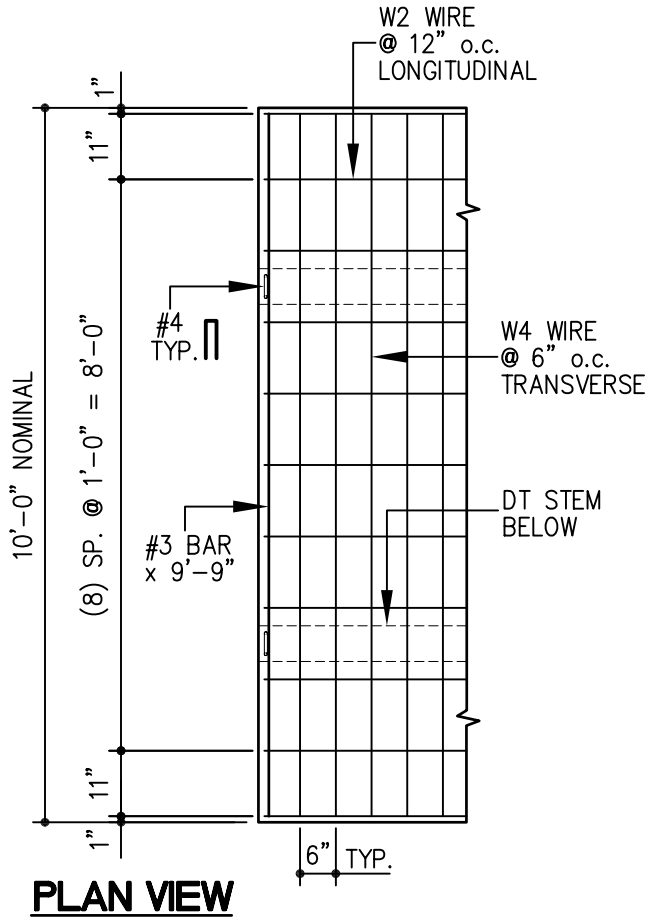
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REVISED:

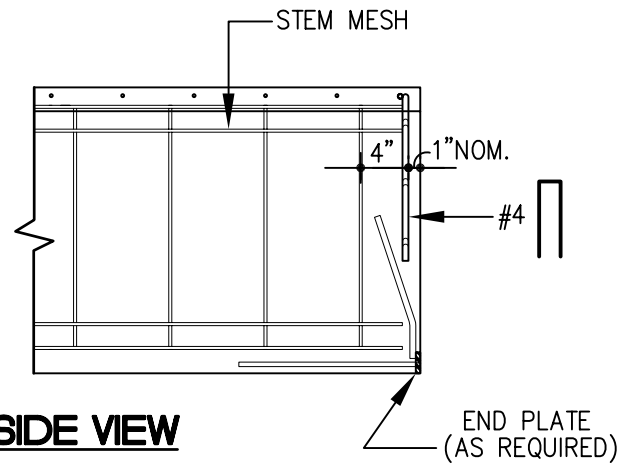
HAWAII DOUBLE TEE

SHEET:

10DT12



SECTION



SIDE VIEW

NOTES:

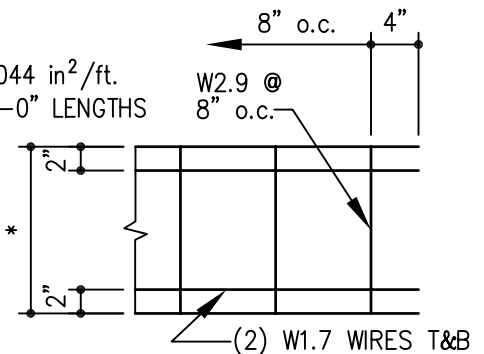
1. REINFORCING DETAILS ARE SHOWN FOR GENERAL DESIGN CONDITIONS TYPICALLY CONSISTING OF UNIFORM DISTRIBUTED LOADS. DESIGN WILL BE CHECKED FOR PROJECT SPECIFIC REQUIREMENTS.
2. DOUBLE TEE MAY REQUIRE SHEAR MESH AT END REGIONS ONLY. CONSULT GPRM Prestress FOR SPECIFIC DESIGN INFORMATION.
3. HIGHER SHEAR LOADS CAN BE ACCOMMODATED UTILIZING (2) LAYERS OF STANDARD STEM MESH, PROVIDING A CUSTOM MESH OR INTRODUCING MILD STEEL REINFORCING.
4. FLANGE CONNECTORS ARE NOMINALLY SPACED AT 8'-0" o.c. AND ASSIST WITH ERECTION STABILITY, ALIGNMENT AND LOAD TRANSFER. THEY ARE GENERALLY NOT INCLUDED IN THE FINAL DESIGN ANALYSIS.
5. STANDARD END CONFINEMENT/BEARING PLATES ARE PROVIDED AS NEEDED. SPECIAL CONDITIONS SUCH AS DAPS & CAST-IN ENDS ARE ADDRESSED WITH CUSTOM SOLUTIONS.

STANDARD MESH:

DECK MESH
 (SEE PLAN VIEW DETAIL ABOVE)
 12 x 6 - W2.0 x W4.0
 SHEET SIZE= 9'-10" x 20'-0"
 $F_y = 65$ ksi
 LONGITUDINAL $A_s = 0.020$ in²/ft.
 TRANSVERSE $A_s = 0.080$ in²/ft.

STEM MESH
 $F_y = 65$ ksi
 A_s PROVIDED=0.044 in²/ft.
 SHEET SIZE= 10'-0" LENGTHS

- * = 20" -DT24
- = 14" -DT18
- = 8" -DT12



ISSUED:

REVISED:

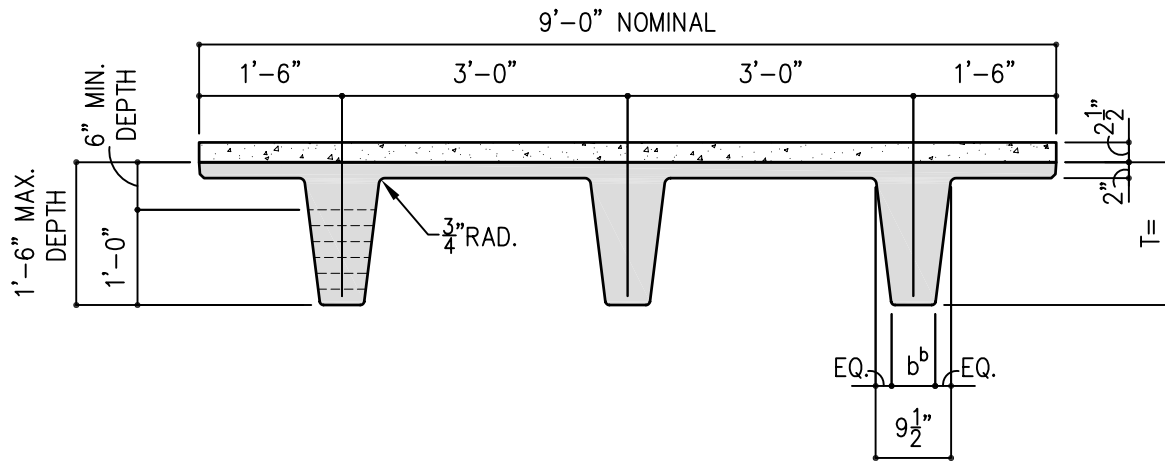
HAWAII DOUBLE TEE

SHEET:

10DTR



9 FT. TRIPLE TEE 9TT

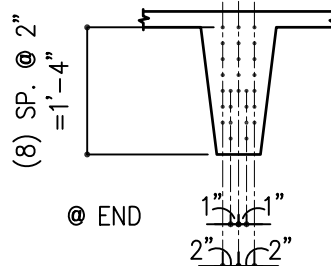


SECTION PROPERTIES:

		A in ²	I in ⁴	Y _t in	Y _b in	S _t in	S _b in ³	WT plf	WT psf	T in	b _b in
STANDARD UNIT	9TT6	324.0	847.95	1.99	4.01	426.61	211.34	349	39	6	8 1/2"
	9TT8	373.5	1938.90	2.65	5.35	731.50	362.45	402	45	8	8"
	9TT10	420.0	3615.85	3.35	6.65	1078.59	543.93	452	50	10	7 1/2"
	9TT12	463.5	5928.79	4.07	7.93	1457.05	747.55	499	55	12	7"
	9TT14	504.0	8904.86	4.79	9.21	1860.72	966.42	542	60	14	6 1/2"
	9TT16	541.5	12549.34	5.49	10.51	2284.96	1194.28	583	65	16	6"
	9TT18	576.0	16845.22	6.18	11.82	2725.52	1425.21	620	69	18	5 1/2"
COMPOSITE UNIT	9TT6	594.0	2337.96	0.68	5.32	3454.94	439.19	640	71	6	8 1/2"
	9TT8	643.5	4162.93	1.20	6.80	3460.91	612.45	693	77	8	8"
	9TT10	690.0	6792.95	1.77	8.23	3841.79	825.21	743	82	10	7 1/2"
	9TT12	733.5	10270.37	2.35	9.65	4361.85	1064.79	790	88	12	7"
	9TT14	774.0	14606.89	2.95	11.05	4953.13	1321.77	833	92	14	6 1/2"
	9TT16	811.5	19785.88	3.54	12.46	5586.92	1588.14	874	97	16	6"
	9TT18	846.0	25762.88	4.12	13.88	6247.34	1856.63	911	101	18	5 1/2"

NOTES:

1. STRAND LOCATIONS: SECTION TYPICALLY USES A STRAIGHT STRAND PROFILE. DEBONDING OF STRAND WILL COMMONLY BE REQUIRED TO REDUCE STRESSES.
2. STEM FILLERS FOR TT6 THROUGH TT16 HAVE 1/2" CHAMFER AT BOTTOM OF STEMS.



ISSUED:

REVISED:

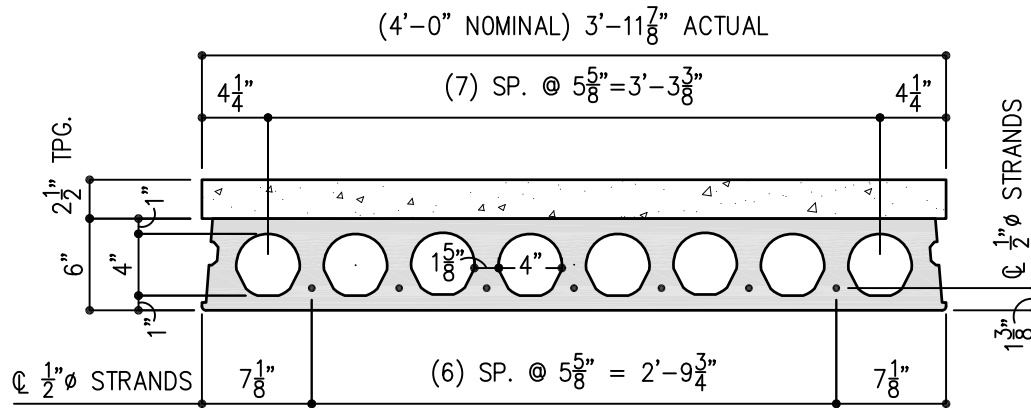
HAWAII TRIPLE TEE

SHEET:

9TT



6" DYNACORE™ PLANK DC6



NOTES:

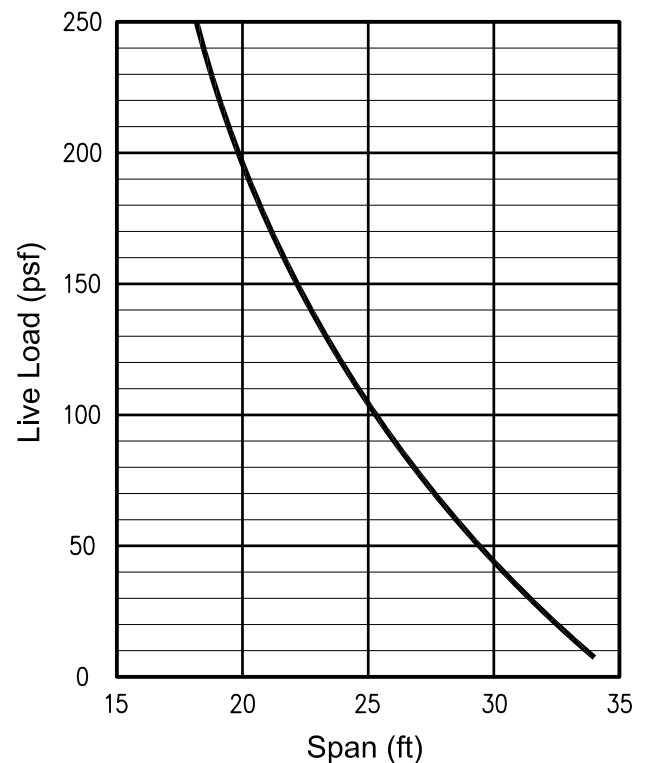
1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)
2. DYNACORE IS AN EXTRUDED PRODUCT AND HAS NO MILD STEEL REINFORCING, CAST-IN EMBEDS OR PLATES.
3. CONCRETE DESIGN STRENGTHS WELL IN EXCESS OF 6000 psi MAY BE USED FOR EXTRUDED PRODUCT. PLEASE CONSULT GPRM Prestress.
4. SECTION PROPERTIES ARE FOR UNGROUTED SECTIONS. IT IS COMMON PRACTICE TO IGNORE THE GROUT KEY IN SPAN DESIGN ANALYSIS. ie USE A FULL 4'-0" WIDE SECTION.
5. THE EXTRUSION PROCESS PRODUCES A MACHINE FINISHED TOP SURFACE THAT DOES NOT RECEIVE ADDITIONAL ROUGHENING. PER ACI 318, THE DESIGN OF HOLLOWCORE SLABS FOR COMPOSITE ACTION IS USUALLY LIMITED TO A HORIZONTAL SHEAR STRENGTH OF 80 psi. FULL SCALE TESTING HAS CONFIRMED THIS SURFACE MEETS THESE REQUIREMENTS.

DYNACORE IS A REGISTERED TRADEMARK OF DYNACORE EQUIPMENT Ltd.

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	bw in	WT plf	WT psf
STANDARD UNIT	172	698	2.92	3.08	13.3	185	47
COMPOSITE UNIT	270	1919	4.49	1.51	-	314	79

LOAD / SPAN TABLE



ISSUED:

REVISED:

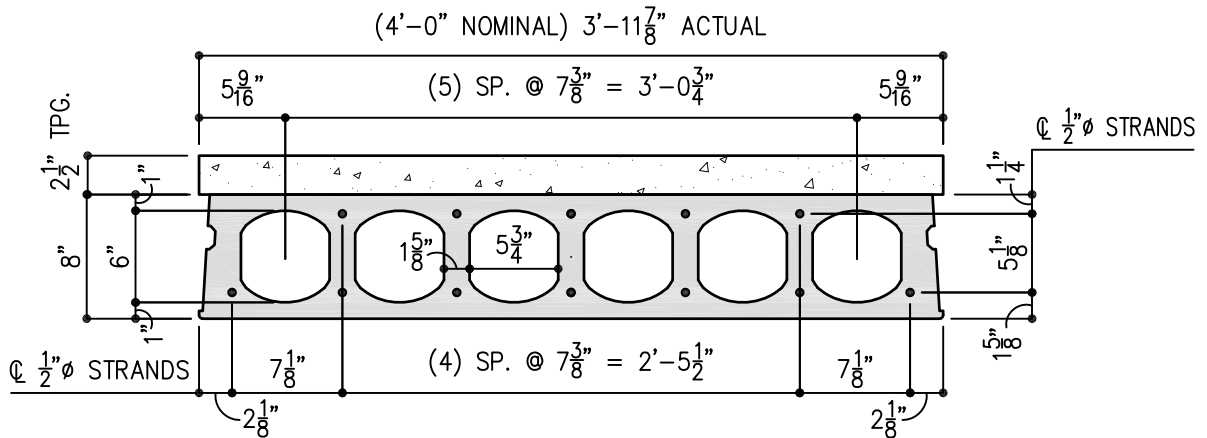
HAWAII DYNACORE™ PLANK

SHEET:

DC6



8" DYNACORE™ PLANK DC8



NOTES:

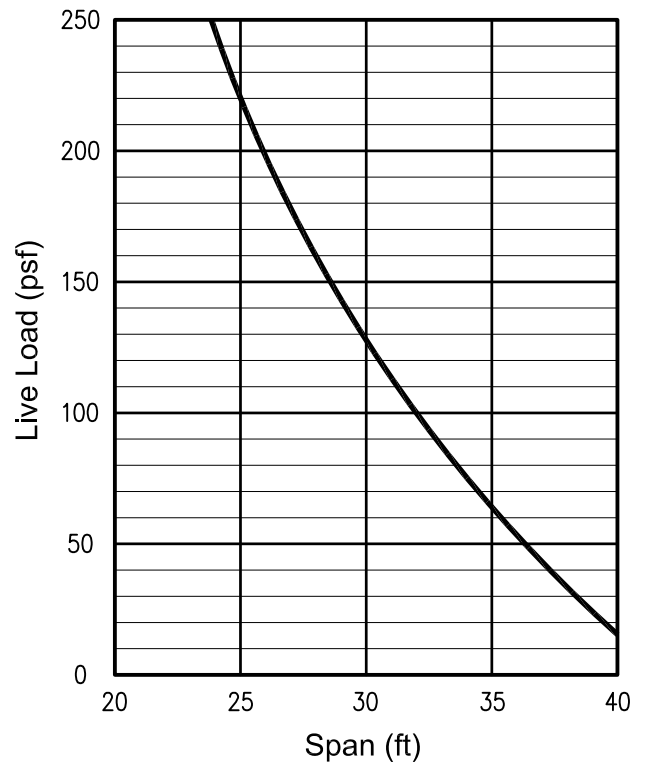
- LOAD/SPAN TABLE:** ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)
- DYNACORE IS AN EXTRUDED PRODUCT AND HAS NO MILD STEEL REINFORCING, CAST-IN EMBEDS OR PLATES.
- CONCRETE DESIGN STRENGTHS WELL IN EXCESS OF 6000 psi MAY BE USED FOR EXTRUDED PRODUCT. PLEASE CONSULT GPRM Prestress.
- SECTION PROPERTIES ARE FOR UNGROUTED SECTIONS. IT IS COMMON PRACTICE TO IGNORE THE GROUT KEY IN SPAN DESIGN ANALYSIS. ie USE A FULL 4'-0" WIDE SECTION.
- THE EXTRUSION PROCESS PRODUCES A MACHINE FINISHED TOP SURFACE THAT DOES NOT RECEIVE ADDITIONAL ROUGHENING. PER ACI 318, THE DESIGN OF HOLLOWCORE SLABS FOR COMPOSITE ACTION IS USUALLY LIMITED TO A HORIZONTAL SHEAR STRENGTH OF 80 psi. FULL SCALE TESTING HAS CONFIRMED THIS SURFACE MEETS THESE REQUIREMENTS.

DYNACORE IS A REGISTERED TRADEMARK OF DYNACORE EQUIPMENT Ltd.

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	bw in	WT plf	WT psf
STANDARD UNIT	198	1587	3.95	4.05	12	213	53
COMPOSITE UNIT	296	3479	5.70	2.30	-	342	86

LOAD / SPAN TABLE



ISSUED:

REVISED:

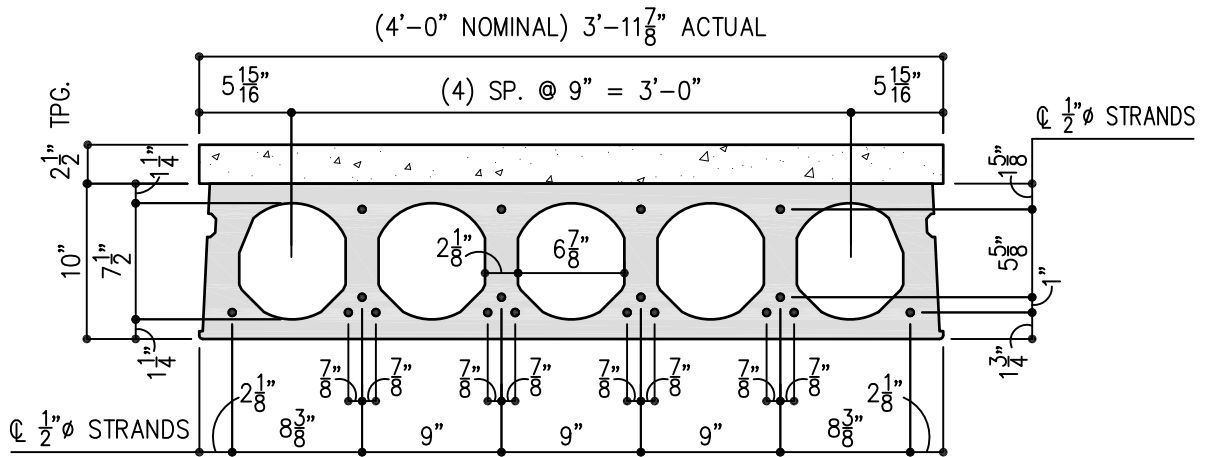
HAWAII DYNACORE™ PLANK

SHEET:

DC8



10" DYNACORE™ PLANK DC10



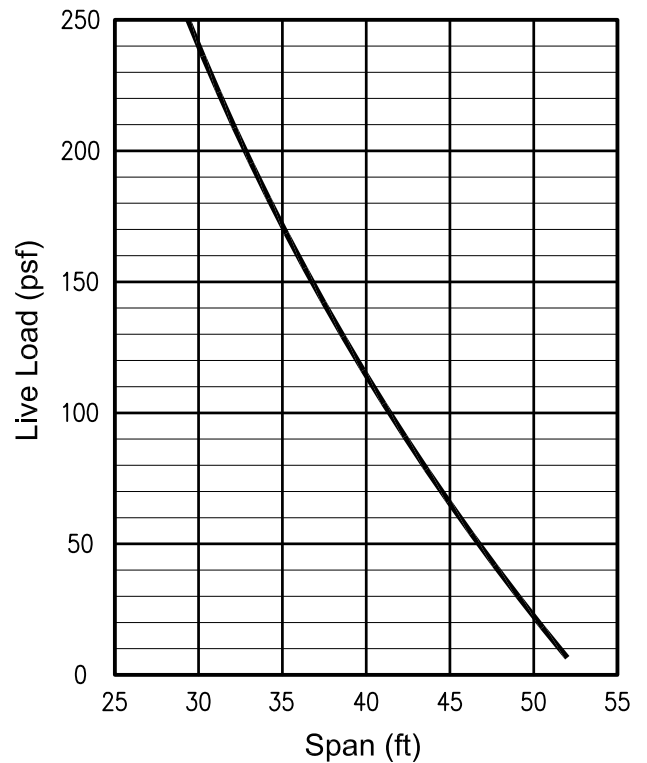
NOTES:

1. LOAD/SPAN TABLE: ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR UNSHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)
2. DYNACORE IS AN EXTRUDED PRODUCT AND HAS NO MILD STEEL REINFORCING, CAST-IN EMBEDS OR PLATES.
3. CONCRETE DESIGN STRENGTHS WELL IN EXCESS OF 6000 psi MAY BE USED FOR EXTRUDED PRODUCT. PLEASE CONSULT GPRM Prestress.
4. SECTION PROPERTIES ARE FOR UNGROUTED SECTIONS. IT IS COMMON PRACTICE TO IGNORE THE GROUT KEY IN SPAN DESIGN ANALYSIS. ie USE A FULL 4'-0" WIDE SECTION.
5. THE EXTRUSION PROCESS PRODUCES A MACHINE FINISHED TOP SURFACE THAT DOES NOT RECEIVE ADDITIONAL ROUGHENING. PER ACI 318, THE DESIGN OF HOLLOWCORE SLABS FOR COMPOSITE ACTION IS USUALLY LIMITED TO A HORIZONTAL SHEAR STRENGTH OF 80 psi. FULL SCALE TESTING HAS CONFIRMED THIS SURFACE MEETS THESE REQUIREMENTS.

SECTION PROPERTIES

	A in ²	I in ⁴	Y _b in	Y _t in	bw in	WT plf	WT psf
STANDARD UNIT	257	3145	4.9	5.1	13	277	69
COMPOSITE UNIT	355	6056	6.65	3.35	-	406	102

LOAD / SPAN TABLE



DYNACORE IS A REGISTERED TRADEMARK OF DYNACORE EQUIPMENT Ltd.

ISSUED:

REVISED:

HAWAII DYNACORE™ PLANK

SHEET:

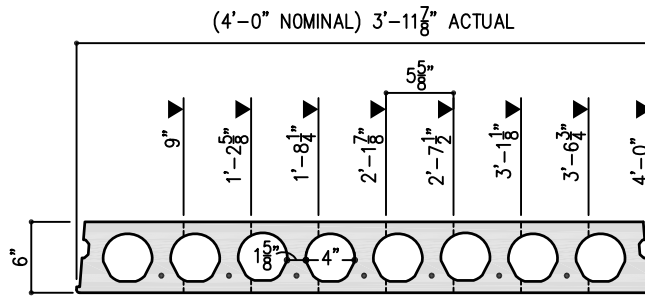
DC10



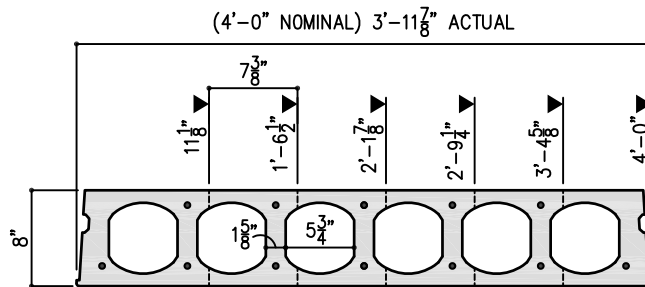
DYNACORE PLANK RIP WIDTHS DC6, DC8, DC10



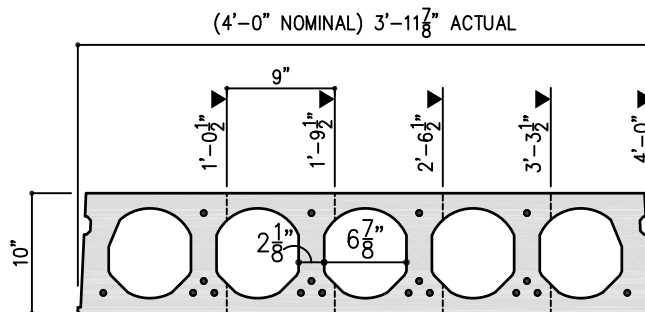
DC6



DC8



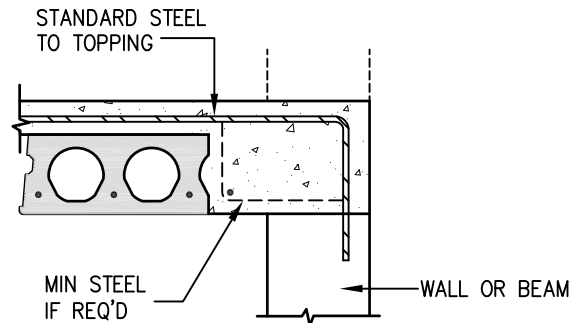
DC10



NOTES:

1. NOMINAL RIP WIDTHS, AS DETAILED, ARE TO BE USED FOR DYNACORE FRAMING LAYOUTS.
2. C.I.P POUR STRIPS SHALL BE USED TO COMPLETE THE FRAMING. THESE SHOULD TYPICALLY BE PLACED AT THE END OF THE RUN, ADJACENT TO A BEAM OR WALL.
3. POUR STRIP WIDTHS CAN GENERALLY BE LIMITED TO THE CORE SPACING OF THE DYNACORE PRODUCT BEING USED.
4. RIPPED UNITS CAN PRODUCE CAMBER AND SWEEP ANOMALIES. WIDER POUR STRIPS AND/OR ADJACENT RIPPED UNITS MAY BE CONSIDERED IN LIEU OF VERY NARROW UNITS.
5. ALTERNATE RIP WIDTHS MAY BE USED UNDER SPECIAL CIRCUMSTANCES. CONSULT GPRM PRESTRESS.

DETAIL:



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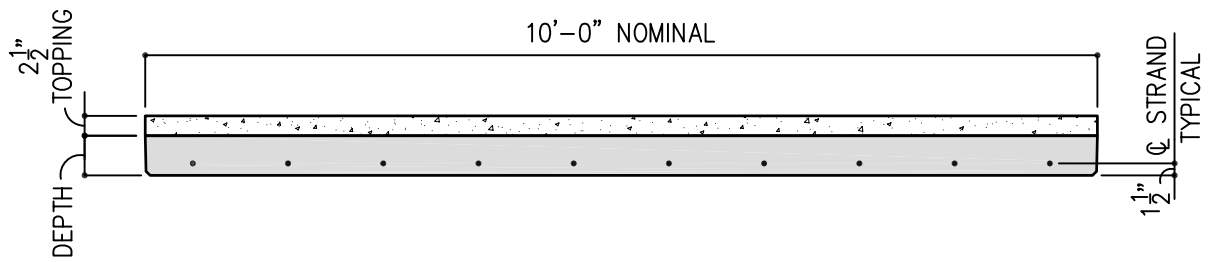
HAWAII DYNACORE™ PLANK

SHEET:

DC1.0



PRESTRESSED PLANK



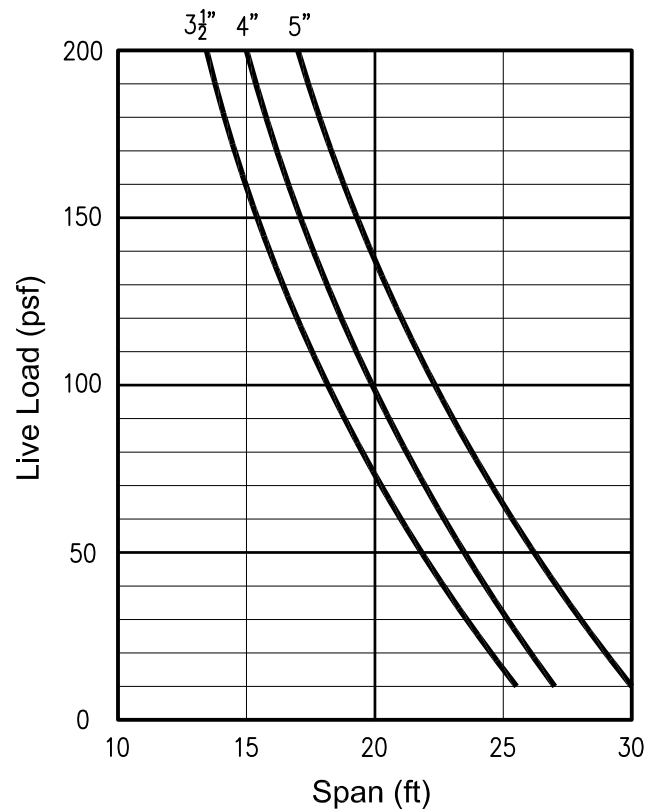
SECTION PROPERTIES

STANDARD UNIT	A in ²	I in ⁴	Y _b in	S _b in ³	St in ³	WT plf	WT psf	COMPOSITE UNIT	A in ²	I in ⁴	Y _b in	S _b in ³	St in ³	WT plf	WT psf
3 1/2"	420	429	1.75	245	245	452	45.2	3 1/2"	665	1949	2.9	683	3022	775	77.5
4"	480	640	2.0	320	320	517	51.7	4"	725	2481	3.1	801	2751	840	84.0
5"	600	1250	2.5	500	500	646	64.6	5"	845	3823	3.6	1066	2706	969	96.9

NOTES:

- LOAD/SPAN TABLE:** ALLOWABLE LIVE LOAD CAPACITY SHOWN IS IN ADDITION TO SDL OF 15 PSF. SPANS SHOWN ARE FOR SHORED CONSTRUCTION. (SEE DESIGN COMMENTARY)
- STANDARD REINFORCING:** PRESTRESSED PLANKS UNDER 12FT. WIDE REQUIRE NOMINAL REINFORCING ONLY, DESIGNED TO ADDRESS PRODUCTION AND HANDLING REQUIREMENTS. (SEE PLANK REINFORCING DETAILS)
- CONSULT GPRM Prestress FOR AVAILABILITY OF SECTION WIDTHS, THICKNESS AND EFFECTS ON ECONOMY. CUSTOM PLANK TO ANY THICKNESS CAN BE PRODUCED.

LOAD / SPAN TABLE



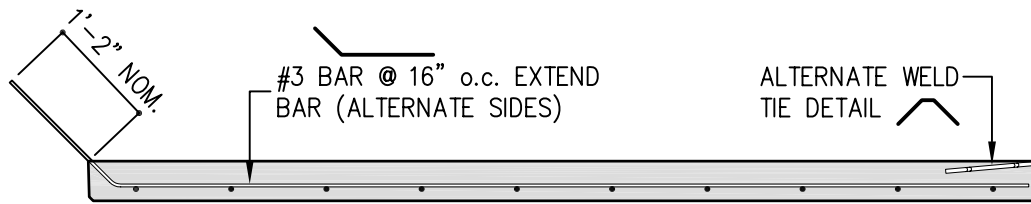
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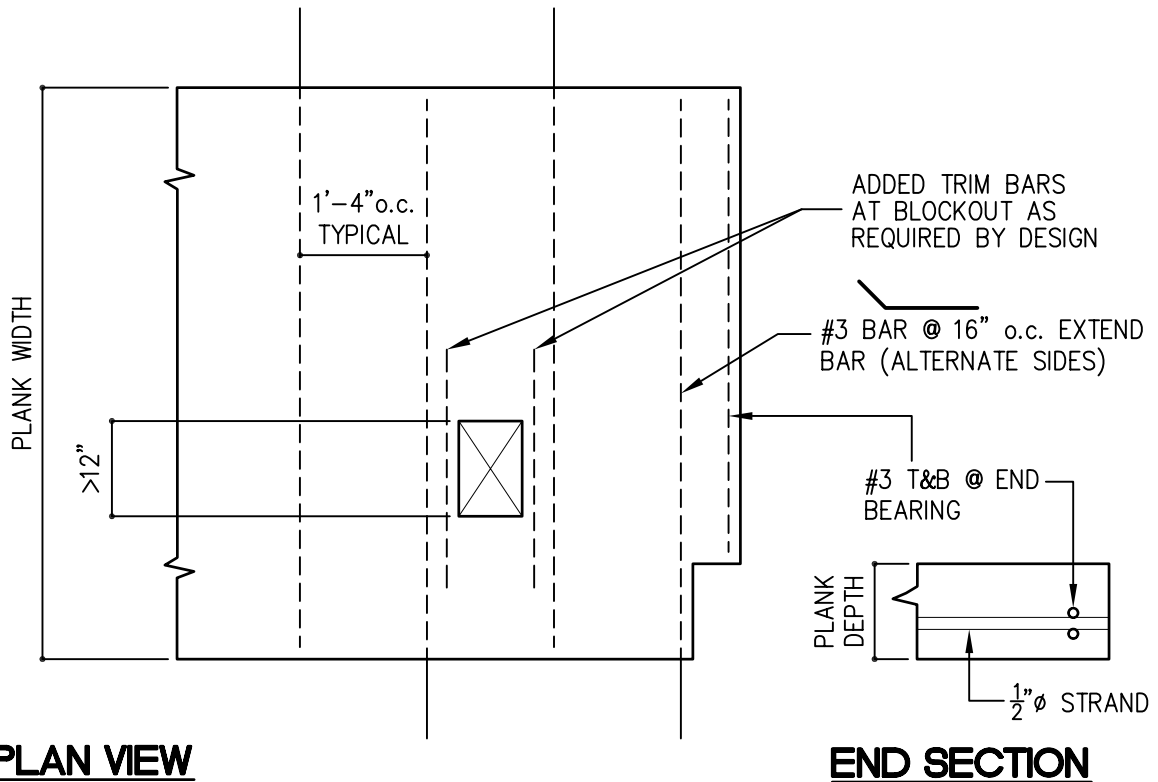
PRESTRESSED PLANK

SHEET:

PP



SECTION



PLAN VIEW

END SECTION

NOTES:

1. NOTCHES FOR STANDARD END BEARING CONDITIONS DO NOT REQUIRE ADDITIONAL REINFORCING TO BE DETAILED.
2. CAST IN BLOCKOUTS UNDER 12" DIMENSION TYPICALLY DO NOT REQUIRE ADDITIONAL TRIM STEEL.
3. #3 BEND-DOWN TIE BARS AND/OR WELD TIES MAY BE REQUIRED FOR ERECTION STABILITY OR TO PROVIDE OVERALL "ROBUSTNESS" OF THE PLANK FLOOR SYSTEM. THEY ARE NOT REQUIRED FOR GENERAL DESIGN CONFORMANCE.

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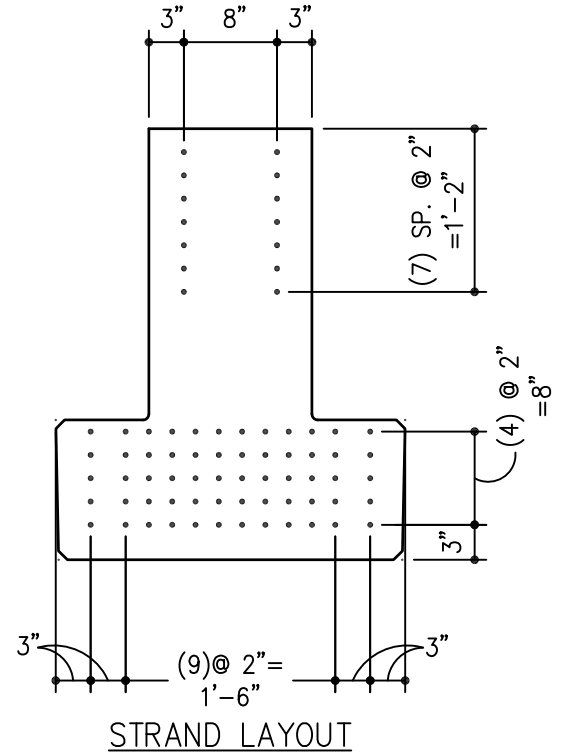
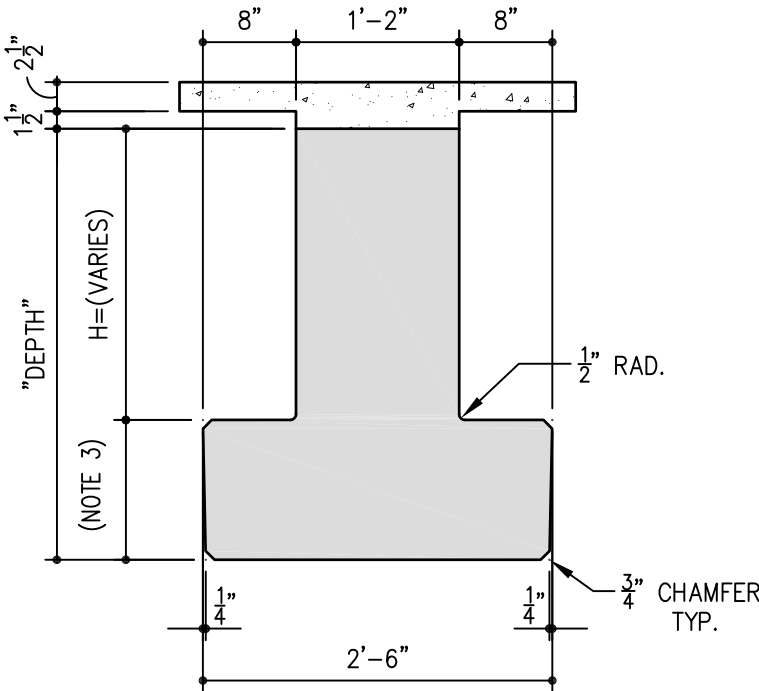
PRESTRESSED PLANK

SHEET:

PPR



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



NOTES:

- LOAD/SPAN CAPACITY:** COMMON SPANS SUPPORTING STANDARD PRODUCTS RANGE FROM 20FT TO 40FT. GREATER SPANS CAN BE ACHIEVED WITH SPECIAL DESIGN CONSIDERATIONS.
- SHORING:** PRODUCT IS TYPICALLY NOT SHORED DURING CONSTRUCTION. SHORING MAY BE USED TO ACHIEVE SPECIFIC DESIGN REQUIREMENTS, OR PROVIDE CONSTRUCTION STABILITY.
- LEDGE HEIGHTS:** 12" IS USED AS THE STANDARD DIMENSION. ALTERNATE HEIGHTS ARE AVAILABLE FOR SPECIFIC APPLICATIONS SUCH AS INCREASED BEAM CAPACITY.
- STEM HEIGHTS:** TOP OF BEAM IS HELD NOMINALLY 1 1/2" BELOW T.O. FLOOR FRAMING PRODUCT (DT ETC.).
H=STEM HEIGHT
11" @ 30IT24, 17" @ 30IT30, 23" @ 30IT36 & 31" @ 30IT44
- SECTION PROPERTIES SHOWN RELATE TO OUR STANDARD DOUBLE TEE SECTIONS. OTHER PRODUCT LINES CAN BE ACCOMMODATED BY ADJUSTING THE STEM HEIGHT.
- 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

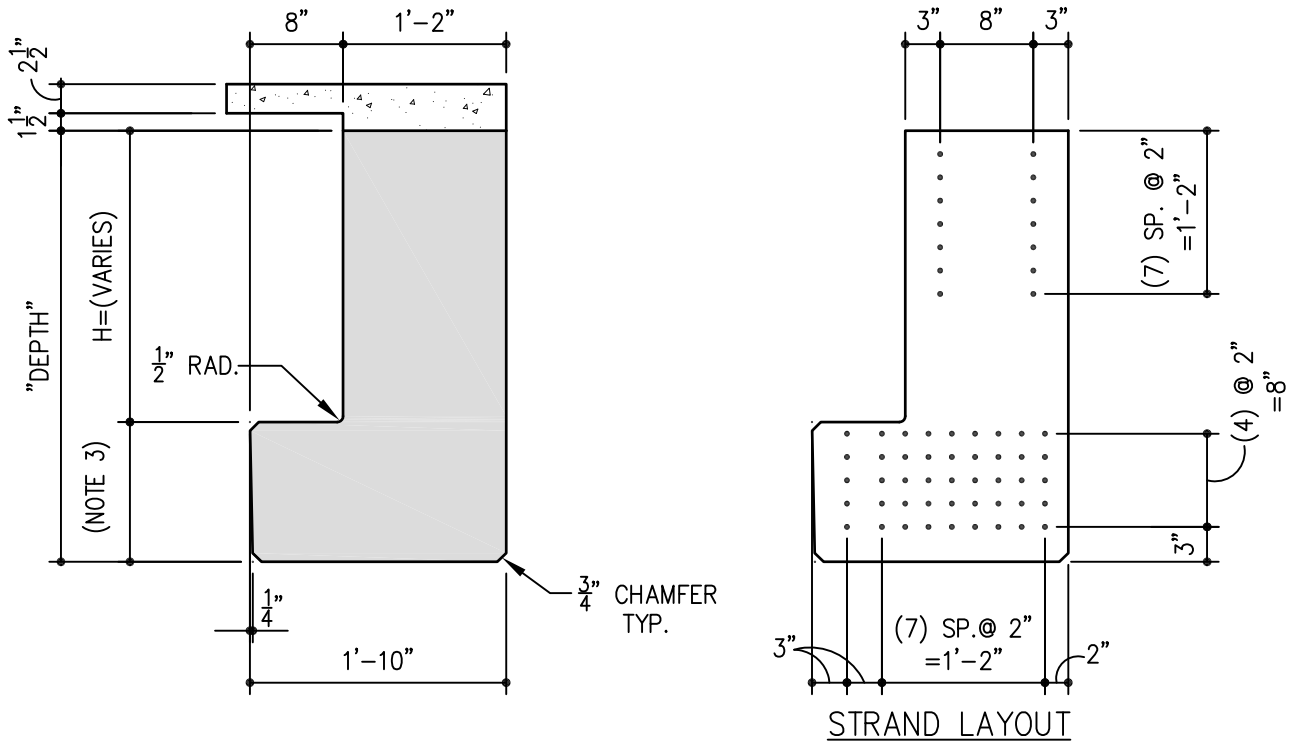
SHEET:

30ITB



22" L-BEAM

22LB24, 22LB30, 30LB36 & 30LB44



NOTES:

- LOAD/SPAN CAPACITY:** COMMON SPANS SUPPORTING STANDARD PRODUCTS RANGE FROM 20FT TO 40FT. GREATER SPANS CAN BE ACHIEVED WITH SPECIAL DESIGN CONSIDERATIONS.
- SHORING:** PRODUCT IS TYPICALLY NOT SHORED DURING CONSTRUCTION. SHORING MAY BE USED TO ACHIEVE SPECIFIC DESIGN REQUIREMENTS, OR PROVIDE CONSTRUCTION STABILITY.
- LEDGE HEIGHTS:** 12" IS USED AS THE STANDARD DIMENSION. ALTERNATE HEIGHTS ARE AVAILABLE FOR SPECIFIC APPLICATIONS SUCH AS INCREASED BEAM CAPACITY.
- STEM HEIGHTS:** TOP OF BEAM IS HELD NOMINALLY 1 1/2" BELOW T.O. FLOOR FRAMING PRODUCT (DT ETC.).
H=STEM HEIGHT
11"@ 22LB24, 17"@ 22LB30, 23"@ 22LB36 & 31"@ 22LB44
- SECTION PROPERTIES SHOWN RELATE TO OUR STANDARD DOUBLE TEE SECTIONS. OTHER PRODUCT LINES CAN BE ACCOMMODATED BY ADJUSTING THE STEM HEIGHT.
- 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

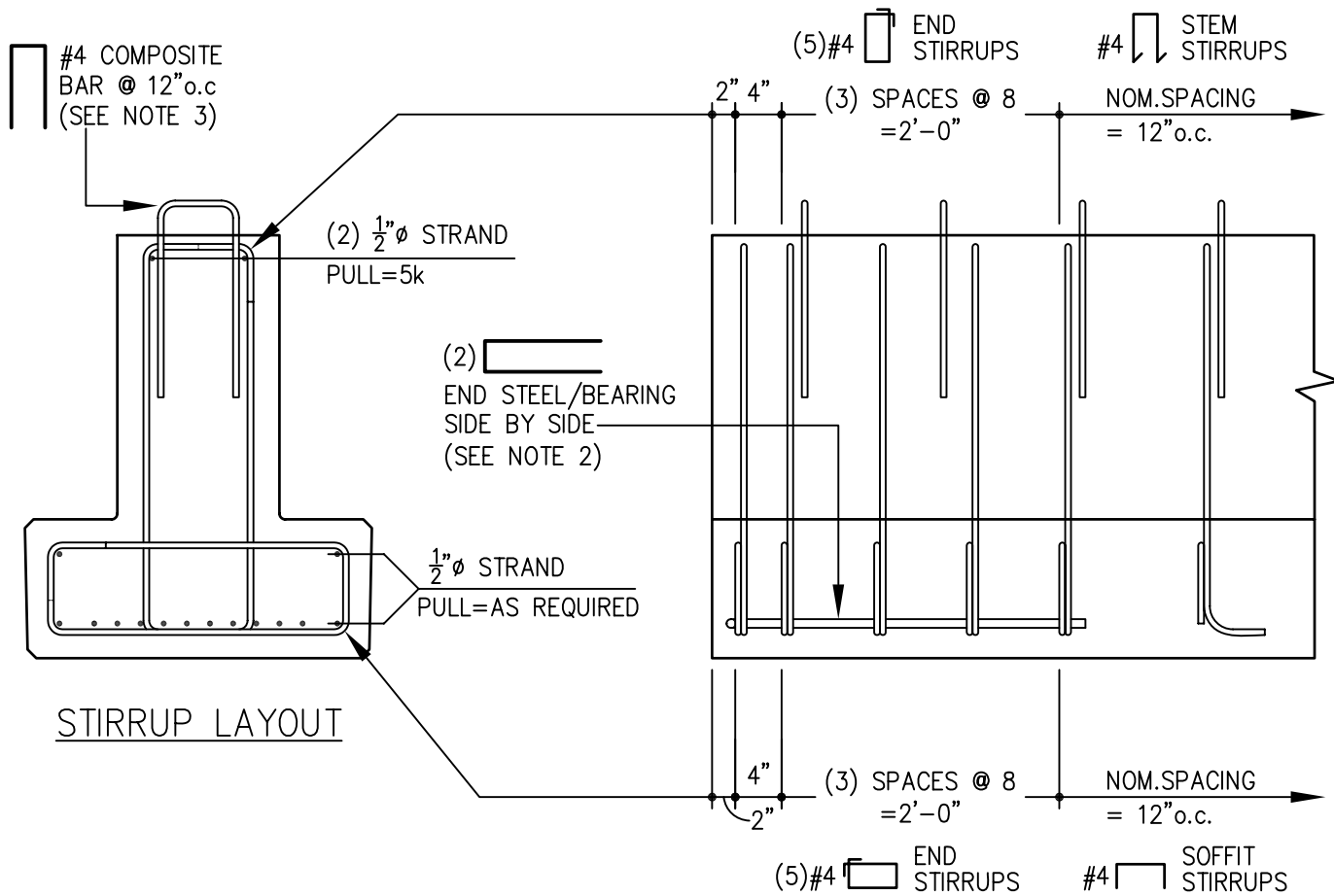
ISSUED:

REVISED:

BEAMS AND SOFFITS

SHEET:

22LB



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.

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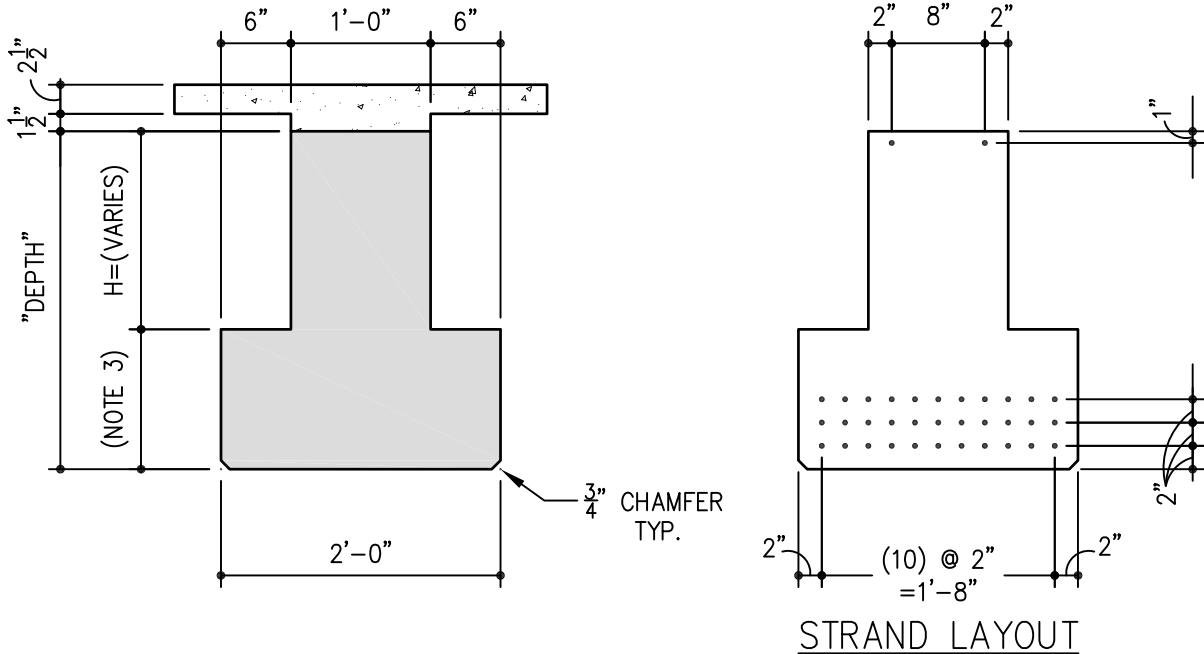
BEAMS AND SOFFITS

SHEET:

ITR



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



NOTES:

- LOAD/SPAN CAPACITY:** COMMON SPANS SUPPORTING STANDARD PRODUCTS RANGE FROM 20FT TO 30FT. GREATER SPANS CAN BE ACHIEVED WITH SPECIAL DESIGN CONSIDERATIONS.
- REFER TO 30ITB FOR STANDARD NOTES & REINFORCING.
- 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.
- STEM HEIGHTS:** TOP OF BEAM IS HELD NOMINALLY 1 1/2" BELOW T.O. FLOOR FRAMING PRODUCT (DT ETC.).
H=STEM HEIGHT
7"@ 24IT20, 11"@ 24IT24, 17"@ 24IT30 & 23"@ 24IT36
- SECTION PROPERTIES SHOWN RELATE TO OUR STANDARD DOUBLE TEE SECTIONS. OTHER PRODUCT LINES CAN BE ACCOMMODATED BY ADJUSTING THE STEM HEIGHT.
- 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

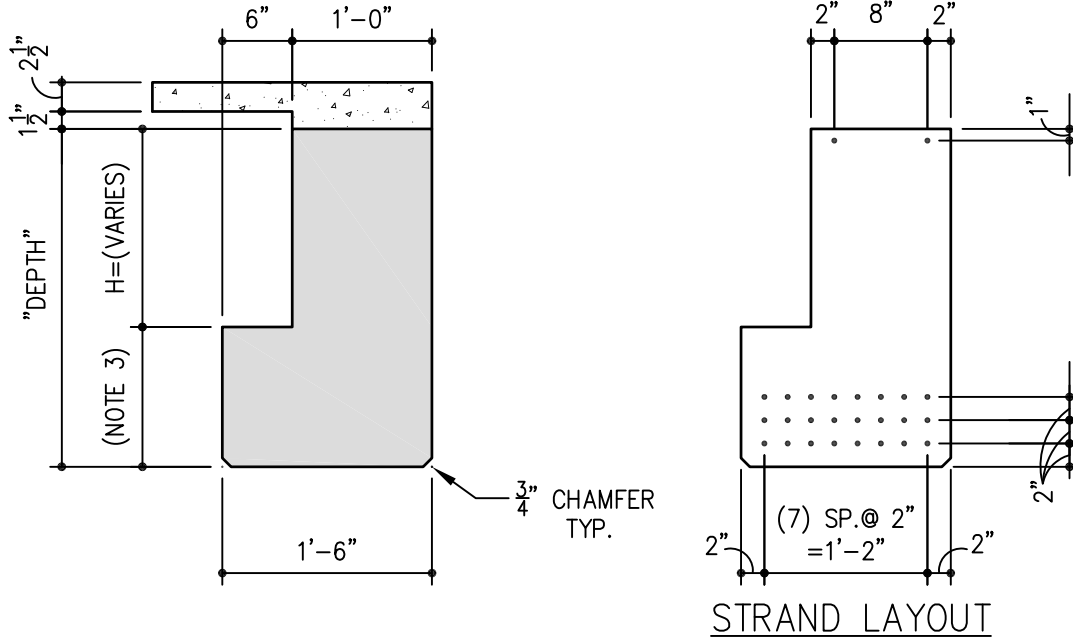
SHEET:

24ITB



18" L-BEAM (Lite)

18LB20, 18LB24, 18LB30 & 18LB36



NOTES:

- LOAD/SPAN CAPACITY:** COMMON SPANS SUPPORTING STANDARD PRODUCTS RANGE FROM 20FT TO 30FT. GREATER SPANS CAN BE ACHIEVED WITH SPECIAL DESIGN CONSIDERATIONS.
- REFER TO 22LB FOR STANDARD NOTES & REINFORCING.
- 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.
- 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
- SECTION PROPERTIES SHOWN RELATE TO OUR STANDARD DOUBLE TEE SECTIONS. OTHER PRODUCT LINES CAN BE ACCOMMODATED BY ADJUSTING THE STEM HEIGHT.
- 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

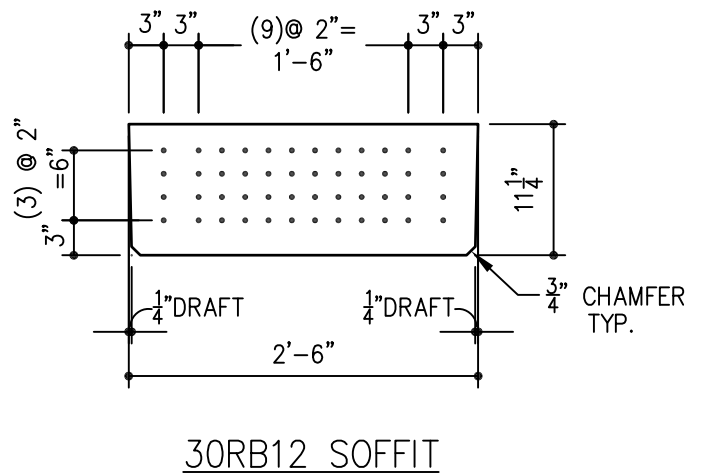
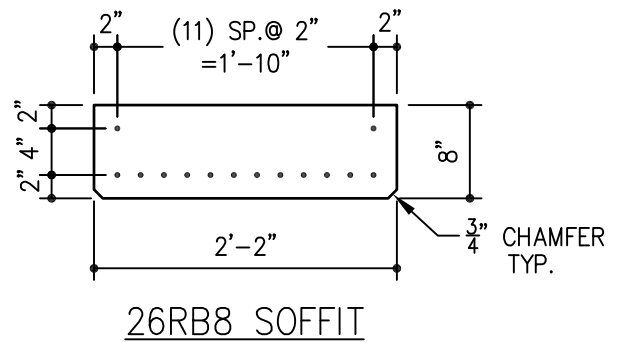
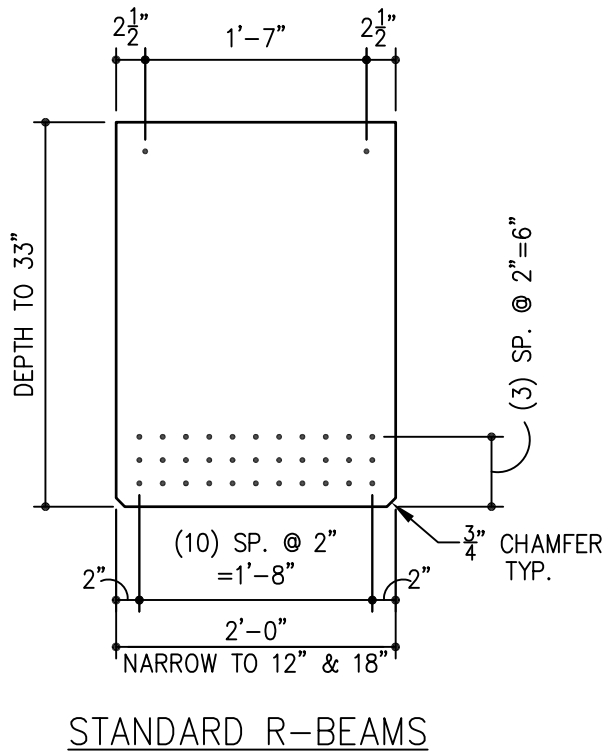
ISSUED:

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BEAMS AND SOFFITS

SHEET:

18LB



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.

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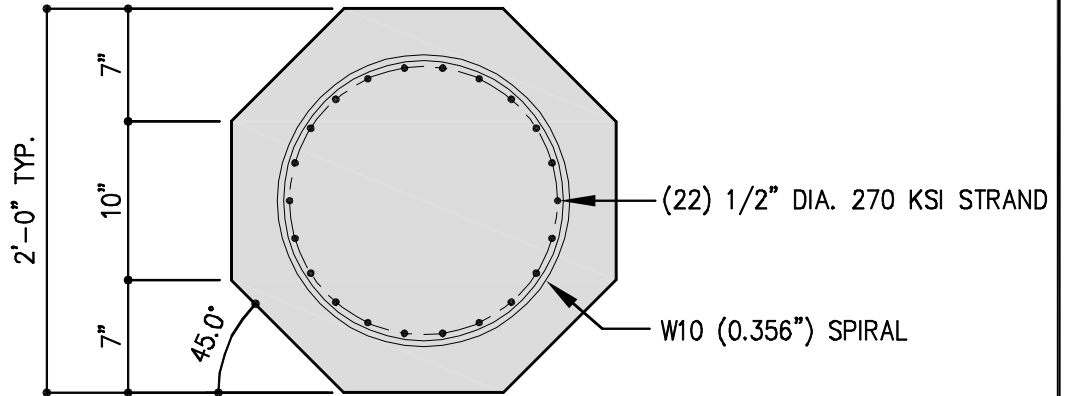
BEAMS AND SOFFITS

SHEET:

RB



24" OCTAGONAL PILE P24



NOTES:

1. PILE SECTION MAY HAVE SLIGHT SIDE DRAFT TO ALLOW FOR STRIPPING.
2. STANDARD COVER TO SPIRAL IS 3". FOR NON-MARINE APPLICATIONS THIS MAY BE REDUCED TO 2" IF THIS ASSISTS WITH REINFORCING REQUIREMENTS.
3. POSSIBLE STRAND LOCATIONS ARE INDICATED. ACTUAL NUMBER OF STRAND WILL BE GOVERNED BY FINAL DESIGN PRESTRESS DEMAND. CONSULT GPRM Prestress FOR ALTERNATE PRESTRESS OPTIONS.

SECTION PROPERTIES:

	A in ²	I in ⁴	r in	S in ³	v/S in	WT plf	CY plf
STANDARD UNIT	477	18160	6.17	1515	6.0	513	0.123

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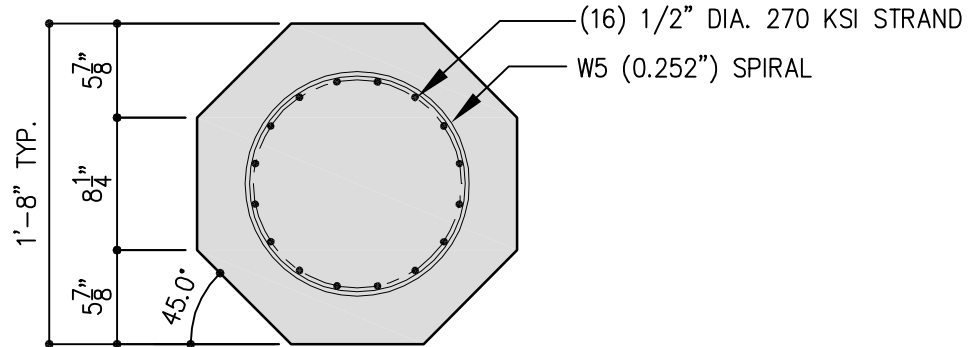
OCTAGONAL PILE

SHEET:

P24



20" OCTAGONAL PILE P20



NOTES:

1. PILE SECTION MAY HAVE SLIGHT SIDE DRAFT TO ALLOW FOR STRIPPING.
2. STANDARD COVER TO SPIRAL IS 3". FOR NON-MARINE APPLICATIONS THIS MAY BE REDUCED TO 2" IF THIS ASSISTS WITH REINFORCING REQUIREMENTS.
3. POSSIBLE STRAND LOCATIONS ARE INDICATED. ACTUAL NUMBER OF STRAND WILL BE GOVERNED BY FINAL DESIGN PRESTRESS DEMAND. CONSULT GPRM Prestress FOR ALTERNATE PRESTRESS OPTIONS.

SECTION PROPERTIES:

	A in ²	I in ⁴	r in	S in ³	V/S in	WT plf	CY plf
STANDARD UNIT	331	8755	5.14	876	5.0	356	0.085

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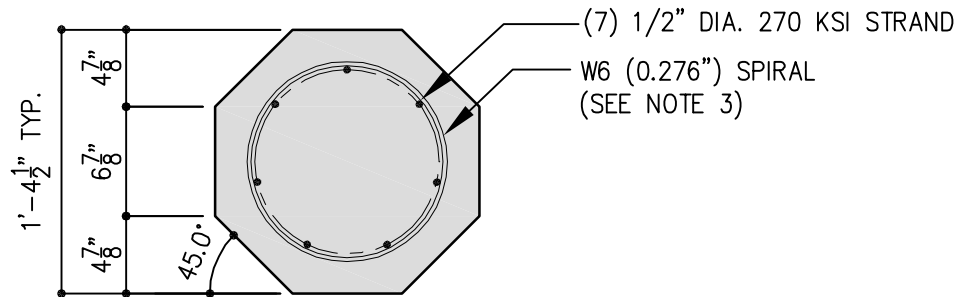
OCTAGONAL PILE

SHEET:

P20



16.5" OCTAGONAL PILE P16.5



NOTES:

1. PILE SECTION MAY HAVE SLIGHT SIDE DRAFT TO ALLOW FOR STRIPPING.
2. STANDARD COVER TO SPIRAL IS 2". FOR MARINE APPLICATIONS INCREASE TO 3".
3. W6 SPIRAL WITH 85 KSI MIN YIELD HAS BEEN ADOPTED TO HELP ADDRESS SPACING CONCERNS FOR SDC C, D & E. CONSULT GPRM Prestress FOR POSSIBLE ALTERNATIVES.

SECTION PROPERTIES:

	A in ²	I in ⁴	r in	S in ³	V/S in	WT plf	CY plf
STANDARD UNIT	225	4057	4.24	491	4.13	242	0.058

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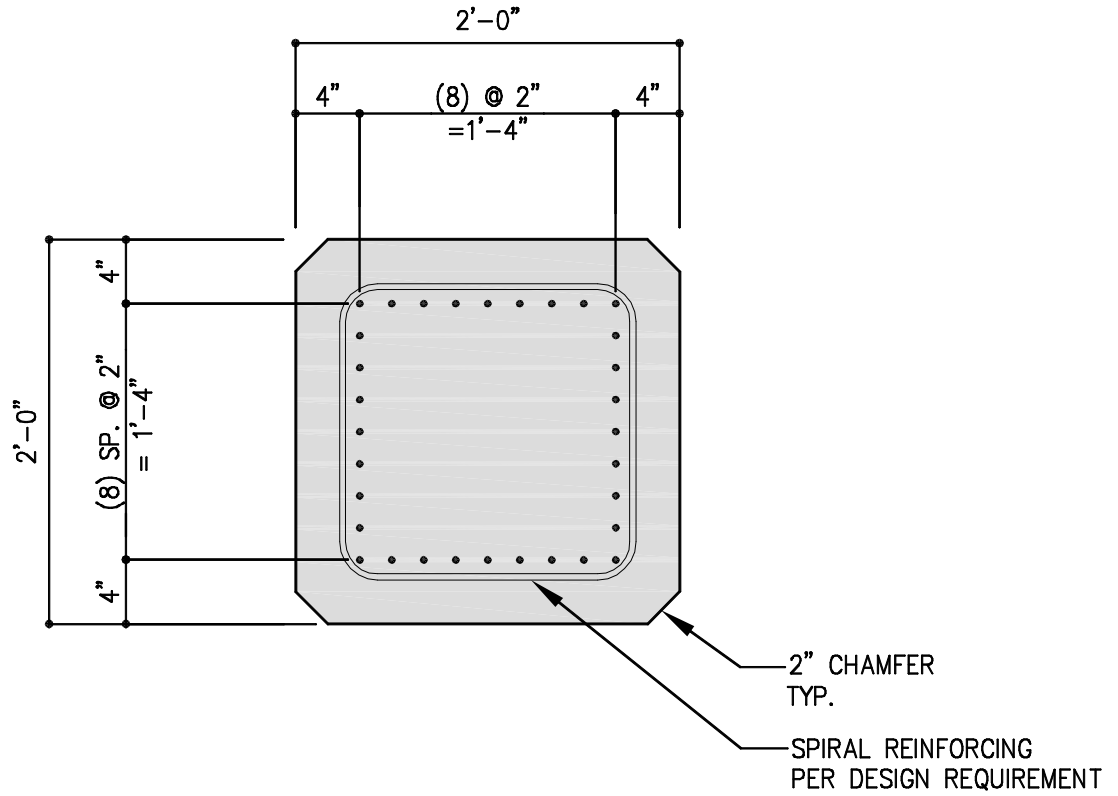
OCTAGONAL PILE

SHEET:

P16.5



24" SQUARE PILE P24S



NOTES:

1. PILE SECTION MAY HAVE SLIGHT SIDE DRAFT TO ALLOW FOR STRIPPING.
2. STANDARD COVER TO SPIRAL IS 3". FOR NON-MARINE APPLICATIONS THIS MAY BE REDUCED TO 2" IF THIS ASSISTS WITH REINFORCING REQUIREMENTS.
3. POSSIBLE STRAND LOCATIONS ARE INDICATED. ACTUAL NUMBER OF STRAND WILL BE GOVERNED BY FINAL DESIGN PRESTRESS DEMAND. CONSULT GPRM Prestress FOR ALTERNATE PRESTRESS OPTIONS.

SECTION PROPERTIES:

	A in ²	I in ⁴	r in	S in ³	v/S in	WT plf	CY plf
STANDARD UNIT	576	27648	6.93	2304	6.0	620	0.148

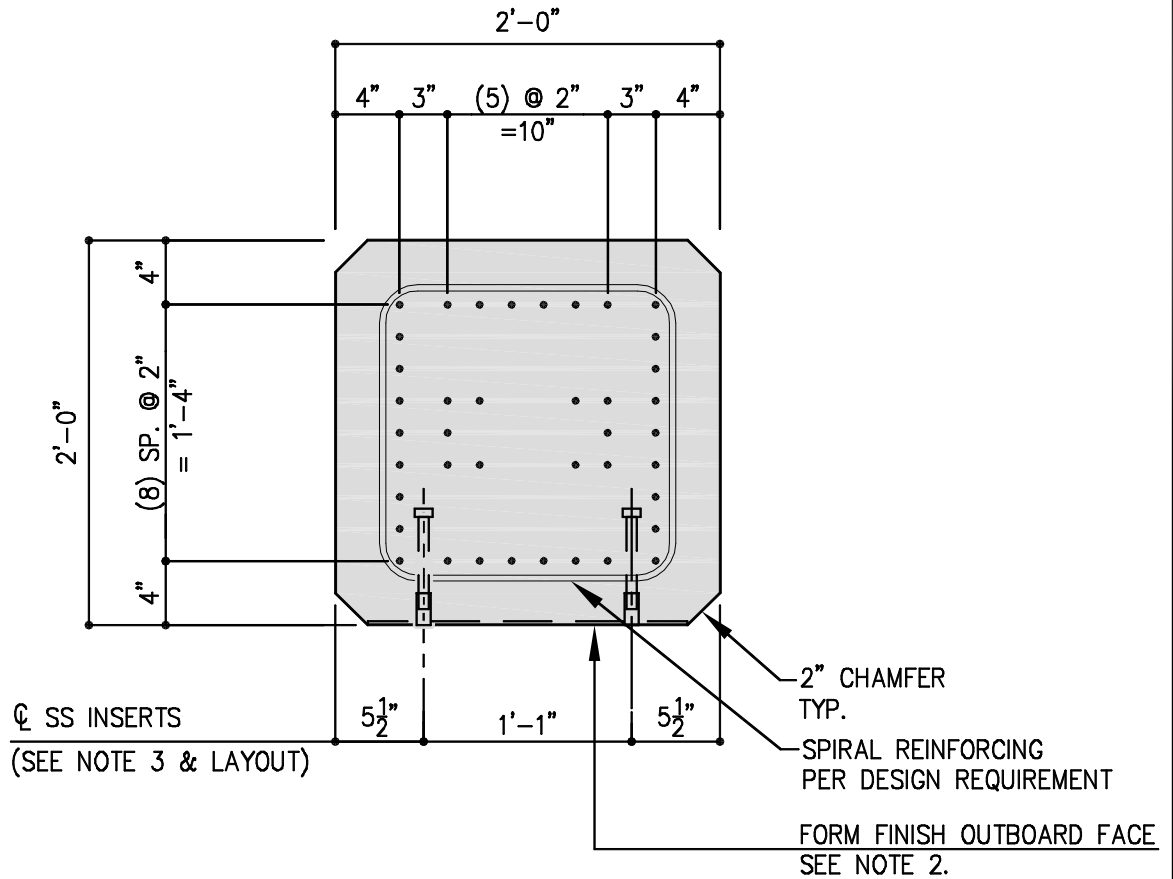
ISSUED:

REVISED:

SQUARE PILE

SHEET:

P24S



NOTES:

1. SEE SHEET P24S FOR GENERAL NOTES, SECTION PROPERTIES, ETC..
2. STAINLESS STEEL INSERTS SHOULD BE LOCATED AS INDICATED TO AVOID STRAND. INSERTS WILL BE NOMINALLY RECESSED TO ALLOW FOR SETTING HARDWARE & TEMPLATES.
3. 7/8" DIA. INSERTS HAVE GENERALLY BEEN ADOPTED AS THE STANDRD SIZE HARDWARE FOR ATTACHING UHMW FACE PANELS.

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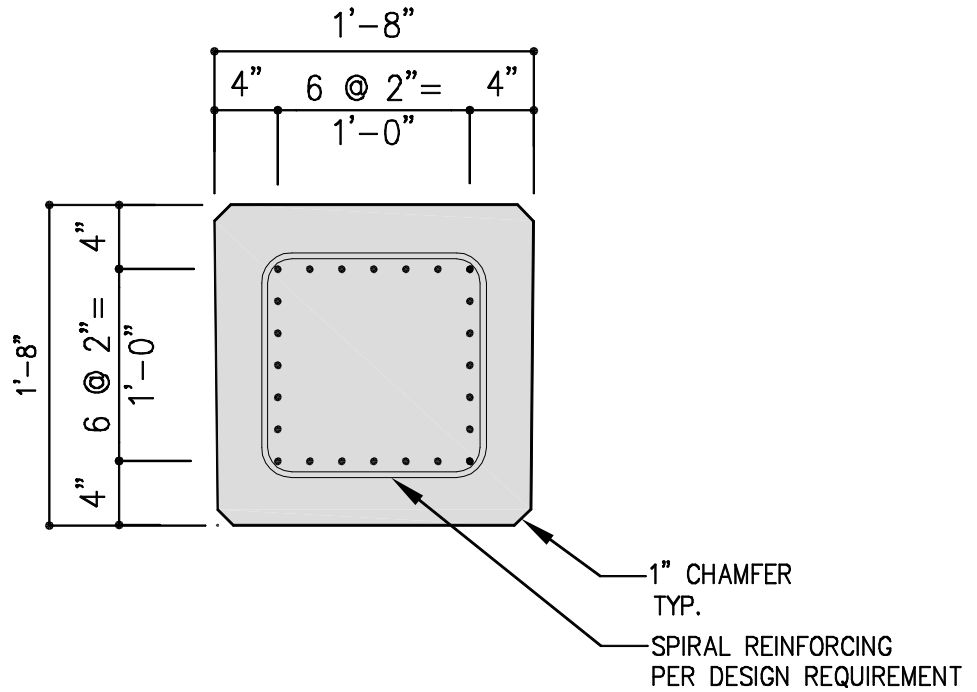
SQUARE PILE

SHEET:

P24F



20" SQUARE PILE P20S



NOTES:

1. PILE SECTION MAY HAVE SLIGHT SIDE DRAFT TO ALLOW FOR STRIPPING.
2. STANDARD COVER TO SPIRAL IS 3". FOR NON-MARINE APPLICATIONS THIS MAY BE REDUCED TO 2" IF THIS ASSISTS WITH REINFORCING REQUIREMENTS.
3. POSSIBLE STRAND LOCATIONS ARE INDICATED. ACTUAL NUMBER OF STRAND WILL BE GOVERNED BY FINAL DESIGN PRESTRESS DEMAND. CONSULT GPRM Prestress FOR ALTERNATE PRESTRESS OPTIONS.

SECTION PROPERTIES:

	A in ²	I in ⁴	r in	S in ³	V/S in	WT plf	CY plf
STANDARD UNIT	400	13333	5.77	1333	5.0	431	0.103

ISSUED:

REVISED:

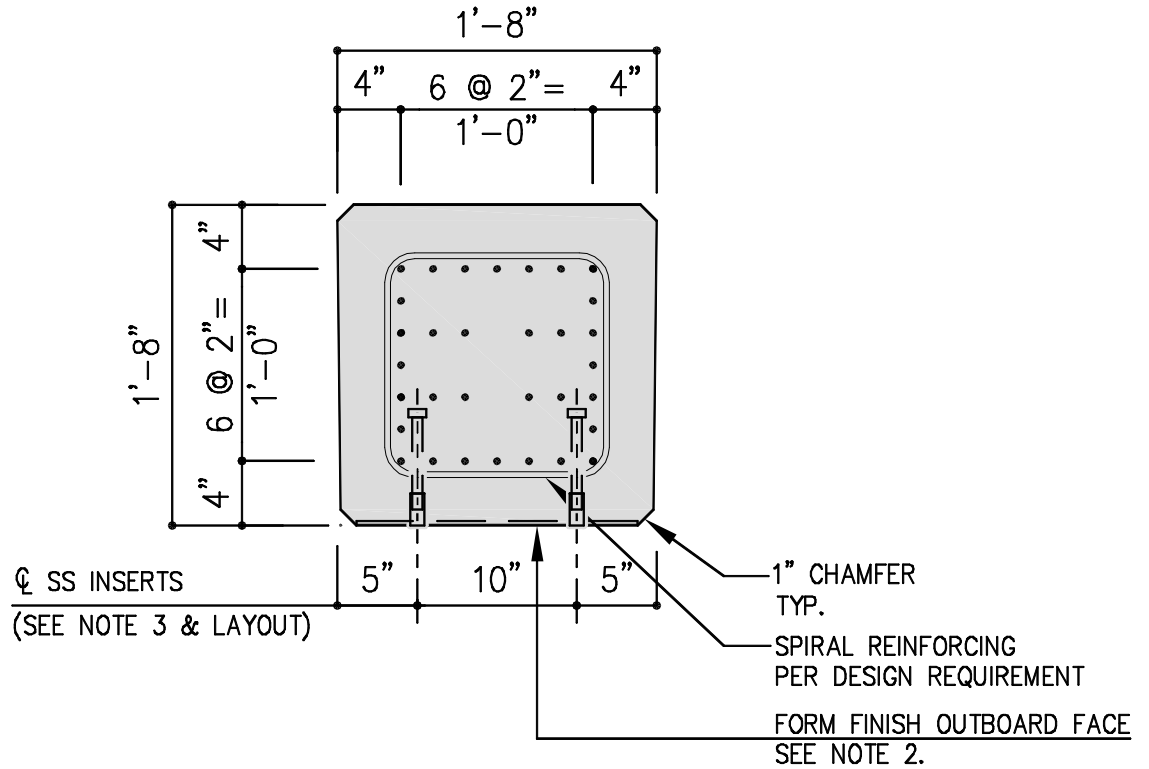
SQUARE PILE

SHEET:

P20S

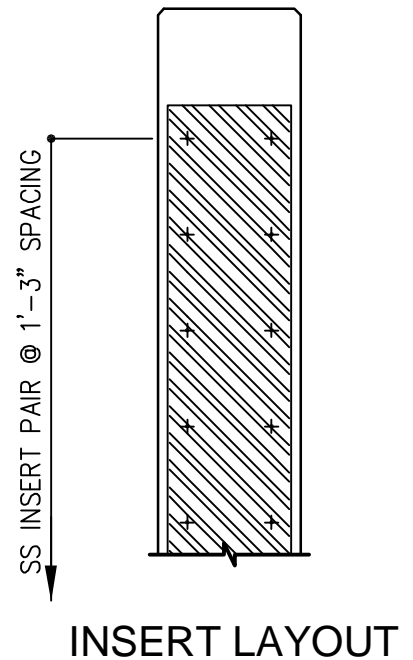


20" FENDER PILE P20F



NOTES:

- SEE SHEET P20S FOR GENERAL NOTES, SECTION PROPERTIES, ETC.
- STAINLESS STEEL INSERTS SHOULD BE LOCATED AS INDICATED TO AVOID STRAND. INSERTS WILL BE NOMINALLY RECESSED TO ALLOW FOR SETTING HARDWARE & TEMPLATES.
- $\frac{7}{8}$ " DIA. INSERTS HAVE GENERALLY BEEN ADOPTED AS THE STANDRD SIZE HARDWARE FOR ATTACHING UHMW FACE PANELS.



ISSUED:

REVISED:

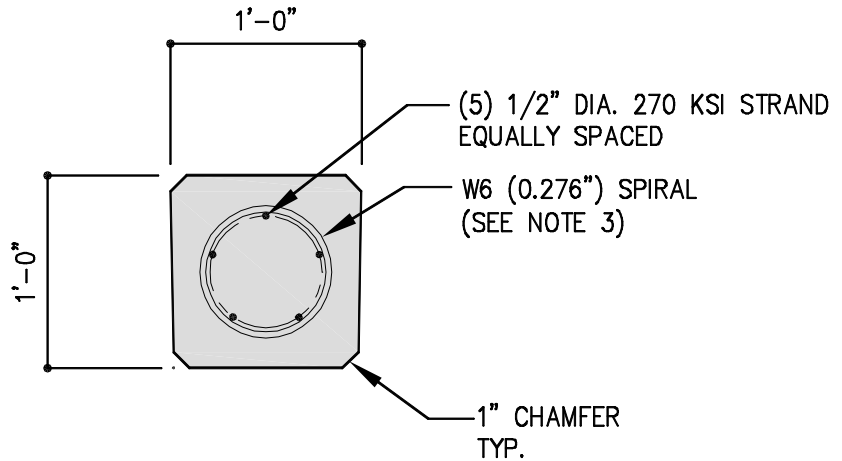
SQUARE PILE

SHEET:

P20F



12" SQUARE PILE P12S



NOTES:

1. PILE SECTION MAY HAVE SLIGHT SIDE DRAFT TO ALLOW FOR STRIPPING.
2. STANDARD COVER TO SPIRAL IS 2". THE P12S IS GENERALLY NOT RECOMMENDED FOR MARINE APPLICATIONS AS COVER REQUIREMENTS BECOME RESTRICTIVE.
3. W6 SPIRAL WITH 85 KSI MIN YIELD HAS BEEN ADOPTED TO HELP ADDRESS SPACING CONCERNS FOR SDC C, D & E. CONSULT GPRM Prestress FOR POSSIBLE ALTERNATIVES.

SECTION PROPERTIES:

	A in ²	I in ⁴	r in	S in ³	V/S in	WT plf	CY plf
STANDARD UNIT	144	1728	3.46	288	3.0	155	0.037

ISSUED:

REVISED:

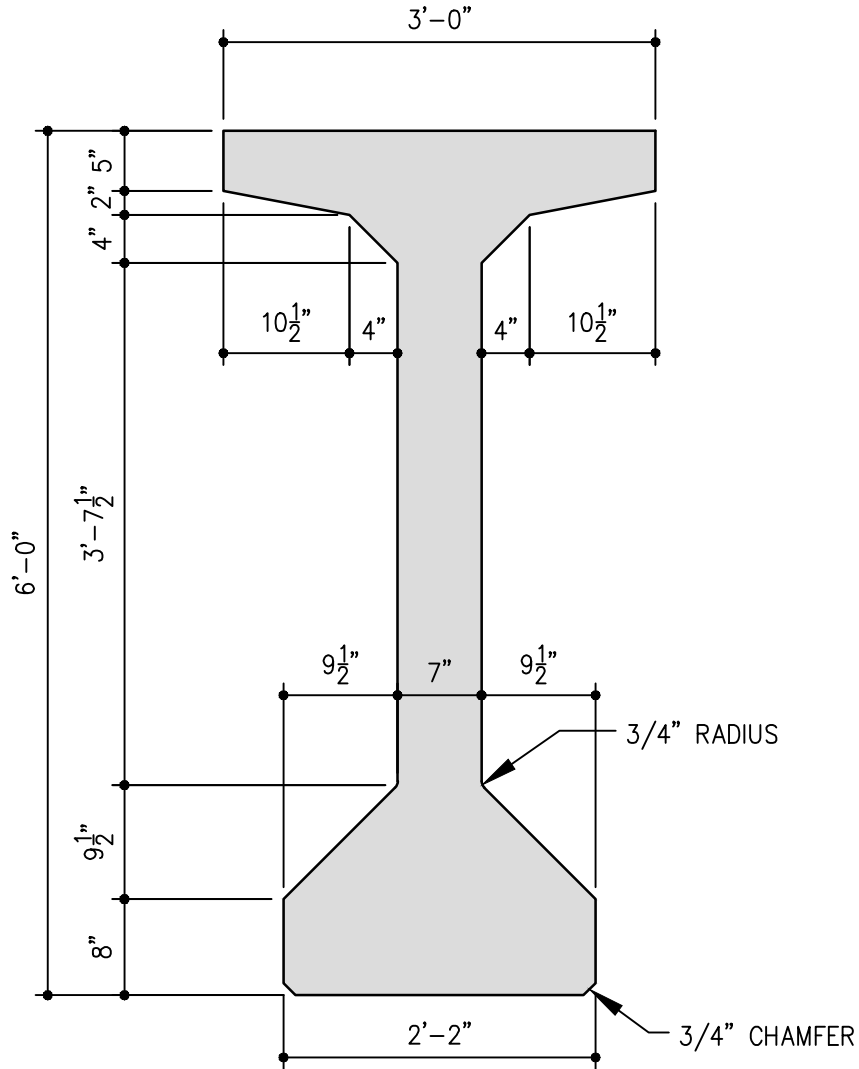
SQUARE PILE

SHEET:

P12S



KEEHI VI



NOTES:

1. PRESTRESS AND REINFORCING REQUIREMENTS ARE GENERALLY PROVIDED BY E.O.R. FINAL STRAND LOCATIONS, DEPRESS GEOMETRY ETC. SHOULD BE COORDINATED IN SHOP DRAWING PHASE.
2. REF COMMENTARY FOR RECOMMENDED CONCRETE STRENGTHS.
3. CENTROID OF BOTTOM STRAND IS GOVERNED BY COVER, REINFORCING, AND TOLERANCE REQUIREMENTS. 2 1/2" IS THE RECOMMENDED MINIMUM.

SECTION PROPERTIES:

	A in ²	I in ⁴	Yt in	Yb in	W K/FT.	St in ³	Sb in ³
STANDARD UNIT	944	638,894	36.73	35.27	0.98	17,394	18,114

ISSUED:

REVISED:

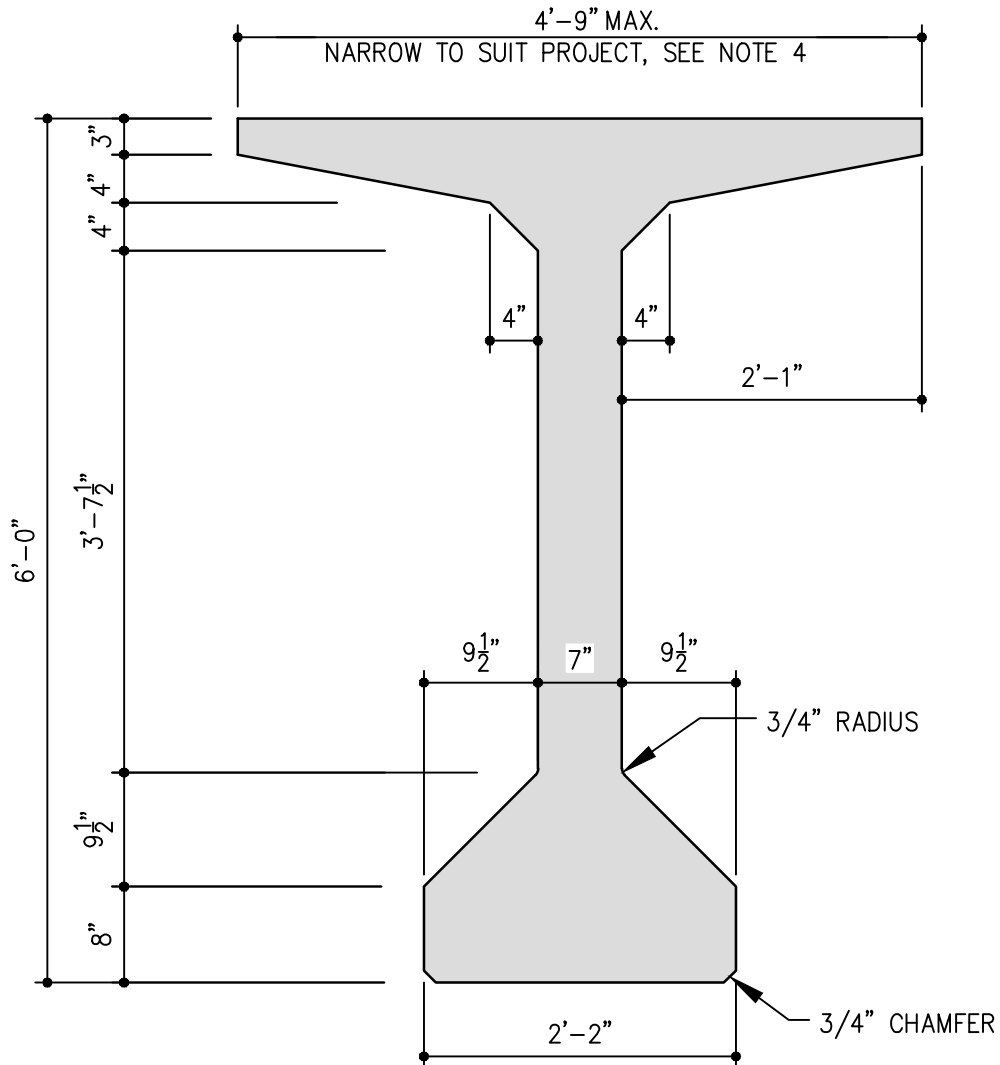
KEEHI GIRDERS

SHEET:

K-VI



KEEHI VI - WIDE FLANGE



NOTES:

1. PRESTRESS AND REINFORCING REQUIREMENTS ARE GENERALLY PROVIDED BY E.O.R. FINAL STRAND LOCATIONS, DEPRESS GEOMETRY ETC. SHOULD BE COORDINATED IN SHOP DRAWING PHASE.
2. REF COMMENTARY FOR RECOMMENDED CONCRETE STRENGTHS.
3. CENTROID OF BOTTOM STRAND IS GOVERNED BY COVER, REINFORCING, AND TOLERANCE REQUIREMENTS. $2\frac{1}{2}$ " IS THE RECOMMENDED MINIMUM.
4. FLANGE WIDTH CAN VARY TO SUIT PROJECT REQUIREMENTS FLANGE EDGE THICKNESS WILL RANGE FROM 5" MAX. TO 3" MIN. FOR WIDEST SECTION.

SECTION PROPERTIES:

	A in ²	I in ⁴	Yt in	Yb in	W K/FT.	St in ³	Sb in ³
VI W	1028.3	731754	33.90	38.10	1.07	21589	19204

ISSUED:

REVISED:

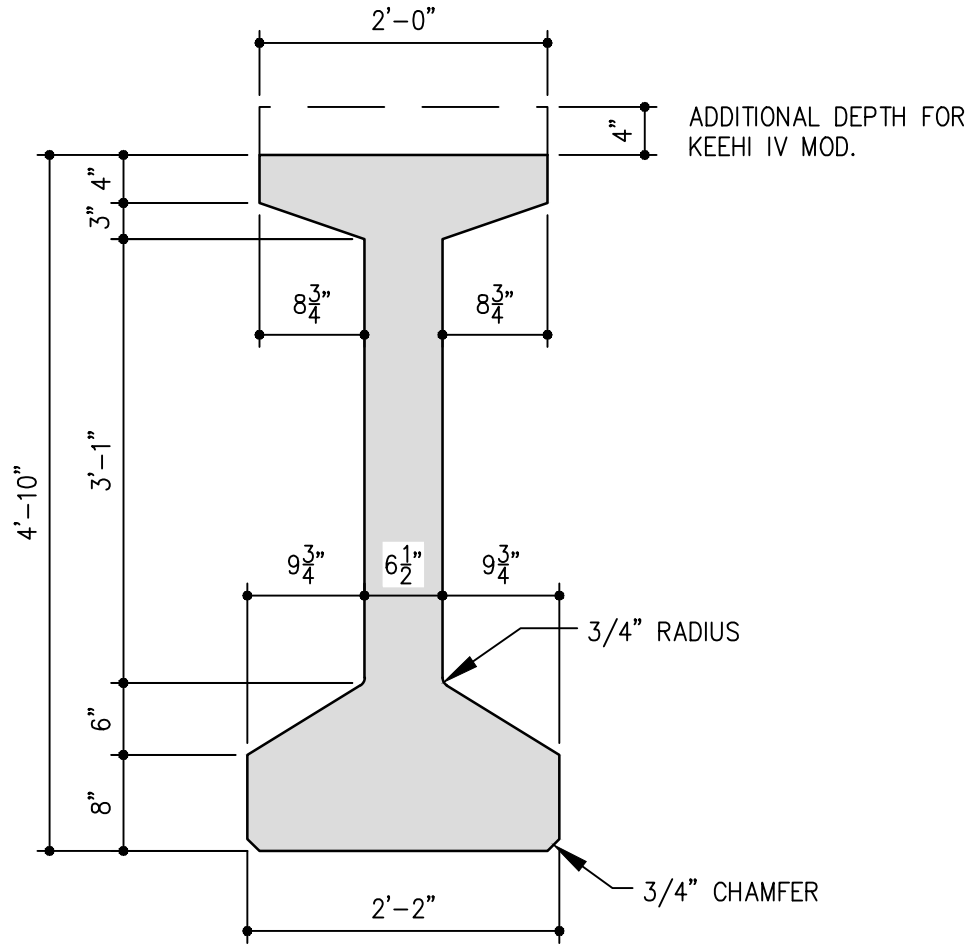
KEEHI GIRDERS

SHEET:

K-VI W



KEEHI IV AND IV MOD.



NOTES:

1. PRESTRESS AND REINFORCING REQUIREMENTS ARE GENERALLY PROVIDED BY E.O.R. FINAL STRAND LOCATIONS, DEPRESS GEOMETRY ETC. SHOULD BE COORDINATED IN SHOP DRAWING PHASE.
2. REF COMMENTARY FOR RECOMMENDED CONCRETE STRENGTHS.
3. CENTROID OF BOTTOM STRAND IS GOVERNED BY COVER, REINFORCING, AND TOLERANCE REQUIREMENTS. 2 1/2" IS THE RECOMMENDED MINIMUM.

SECTION PROPERTIES:

	A in ²	I in ⁴	Yt in	Yb in	W K/FT.	St in ³	Sb in ³
IV	687.75	282,484	32.62	25.38	.716	8,660	11,130
IV MOD	783.8	383,594	32.38	29.62	.816	11,846	12,951

ISSUED:

REVISED:

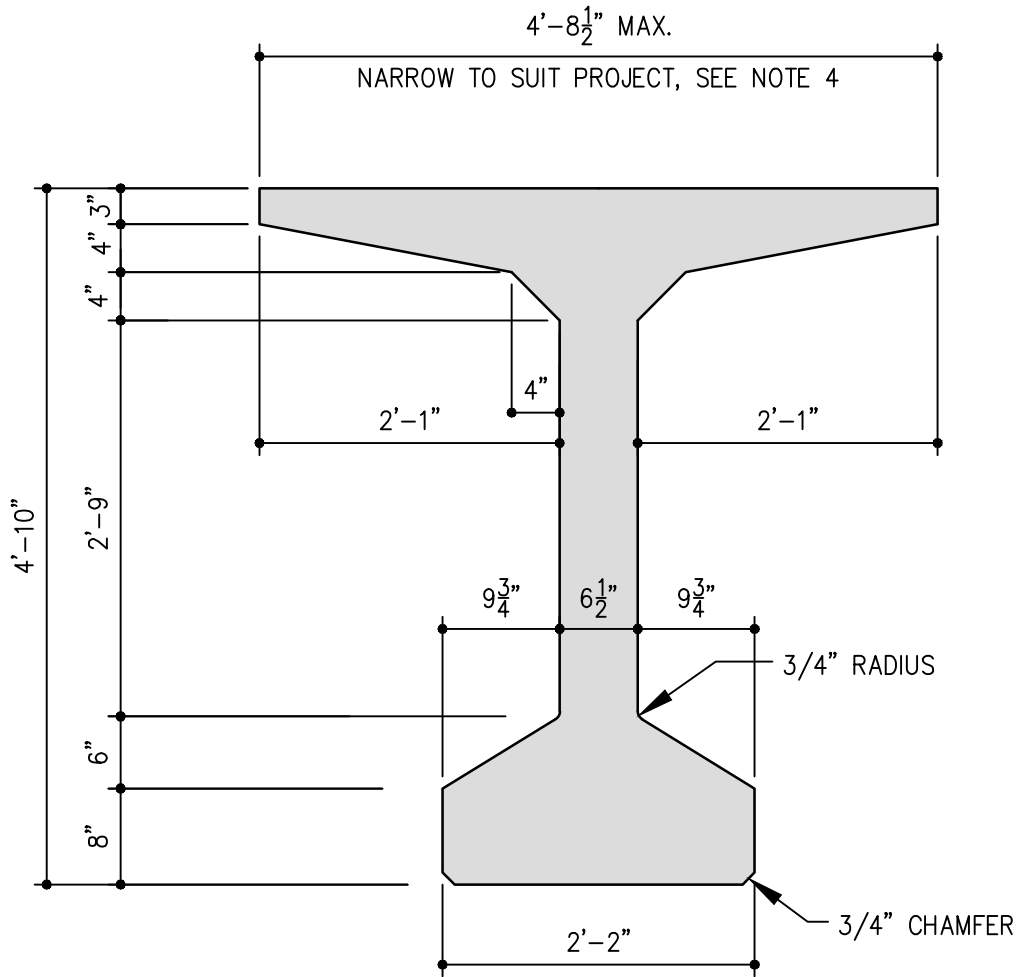
KEEHI GIRDERS

SHEET:

K-IV



KEEHI IV - WIDE FLANGE



NOTES:

1. PRESTRESS AND REINFORCING REQUIREMENTS ARE GENERALLY PROVIDED BY E.O.R. FINAL STRAND LOCATIONS, DEPRESS GEOMETRY ETC. SHOULD BE COORDINATED IN SHOP DRAWING PHASE.
2. REF COMMENTARY FOR RECOMMENDED CONCRETE STRENGTHS.
3. CENTROID OF BOTTOM STRAND IS GOVERNED BY COVER, REINFORCING, AND TOLERANCE REQUIREMENTS. $2\frac{1}{2}$ " IS THE RECOMMENDED MINIMUM.
4. FLANGE WIDTH CAN VARY TO SUIT PROJECT REQUIREMENTS. FLANGE EDGE THICKNESS WILL RANGE FROM 5" MAX. TO 3" MIN. FOR WIDEST SECTION.

SECTION PROPERTIES:

	A in ²	I in ⁴	Yt in	Yb in	W K/FT.	St in ³	Sb in ³
IV W	873.5	409337	26.39	31.61	.910	15514	12948

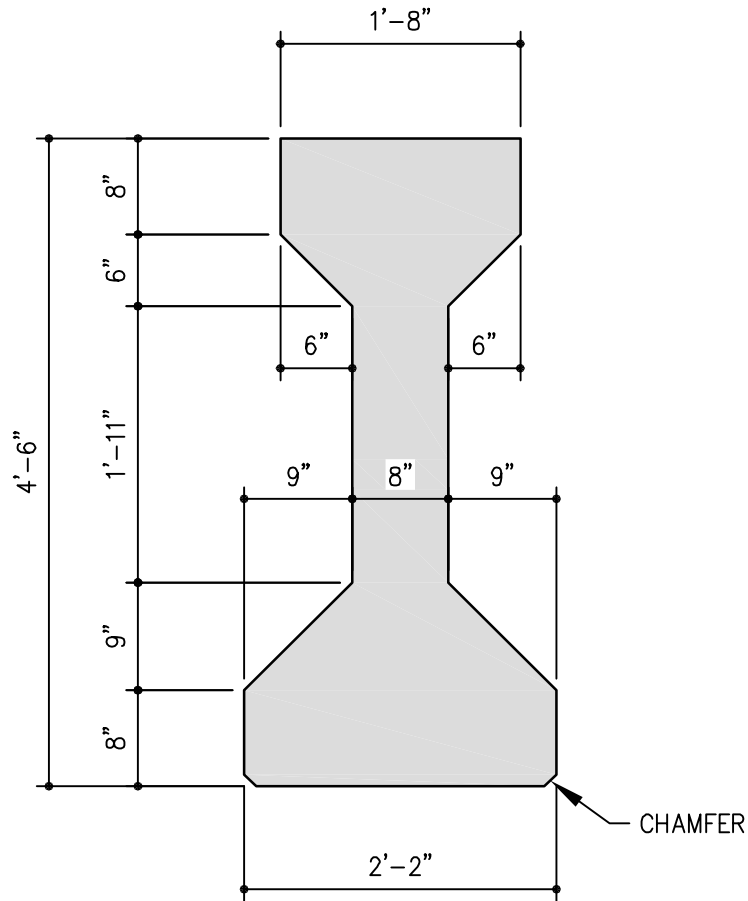
ISSUED:

REVISED:

KEEHI GIRDERS

SHEET:

K-IV W



NOTES:

1. PRESTRESS AND REINFORCING REQUIREMENTS ARE GENERALLY PROVIDED BY E.O.R. FINAL STRAND LOCATIONS, DEPRESS GEOMETRY ETC. SHOULD BE COORDINATED IN SHOP DRAWING PHASE.
2. REF COMMENTARY FOR RECOMMENDED CONCRETE STRENGTHS.
3. CENTROID OF BOTTOM STRAND IS GOVERNED BY COVER, REINFORCING, AND TOLERANCE REQUIREMENTS. $2\frac{1}{2}$ " IS THE RECOMMENDED MINIMUM.

SECTION PROPERTIES:

	A in ²	I in ⁴	Y _t in	Y _b in	W K/FT.	St in ³	S _b in ³
STANDARD UNIT	789	260,730	29.27	24.73	0.82	8,907.75	10,543.1

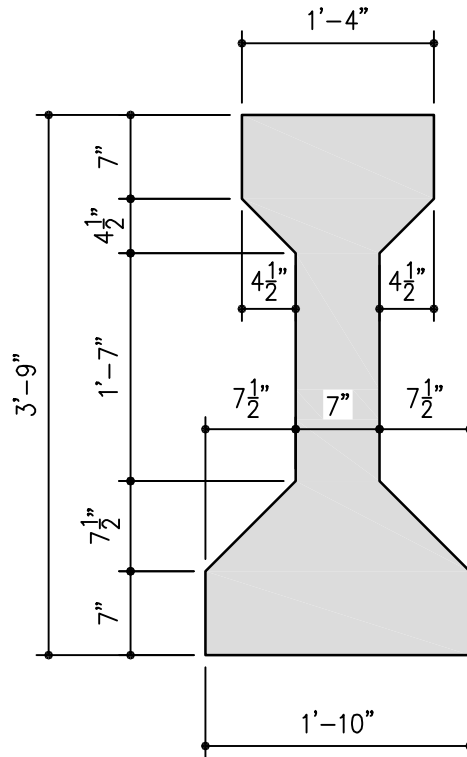
ISSUED:

REVISED:

AASHTO GIRDERS

SHEET:

A-IV



NOTES:

1. PRESTRESS AND REINFORCING REQUIREMENTS ARE GENERALLY PROVIDED BY E.O.R. FINAL STRAND LOCATIONS, DEPRESS GEOMETRY ETC. SHOULD BE COORDINATED IN SHOP DRAWING PHASE.
2. REF COMMENTARY FOR RECOMMENDED CONCRETE STRENGTHS.
3. CENTROID OF BOTTOM STRAND IS GOVERNED BY COVER, REINFORCING, AND TOLERANCE REQUIREMENTS. $2\frac{1}{2}$ " IS THE RECOMMENDED MINIMUM.

SECTION PROPERTIES:

	A in ²	I in ⁴	Y _t in	Y _b in	W K/FT.	St in ³	S _b in ³
STANDARD UNIT	560	125,390	24.73	20.27	0.583	5,070	6,186

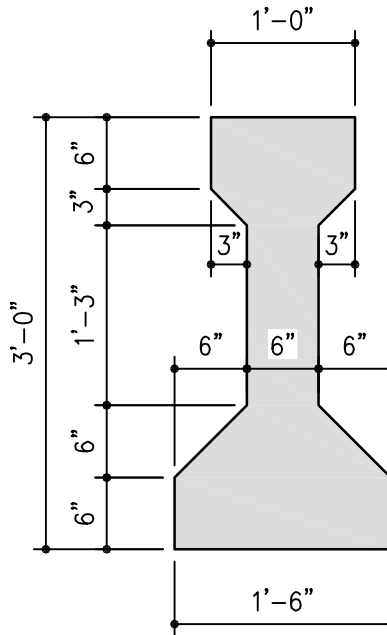
ISSUED:

REVISED:

AASHTO GIRDERS

SHEET:

A-III



NOTES:

1. PRESTRESS AND REINFORCING REQUIREMENTS ARE GENERALLY PROVIDED BY E.O.R. FINAL STRAND LOCATIONS, DEPRESS GEOMETRY ETC. SHOULD BE COORDINATED IN SHOP DRAWING PHASE.
2. REF COMMENTARY FOR RECOMMENDED CONCRETE STRENGTHS.
3. CENTROID OF BOTTOM STRAND IS GOVERNED BY COVER, REINFORCING, AND TOLERANCE REQUIREMENTS. $2\frac{1}{2}$ " IS THE RECOMMENDED MINIMUM.

SECTION PROPERTIES:

	A in ²	I in ⁴	Yt in	Yb in	W K/FT.	St in ³	Sb in ³
STANDARD UNIT	369	50,979	20.17	15.83	0.39	2,527	3,220

ISSUED:

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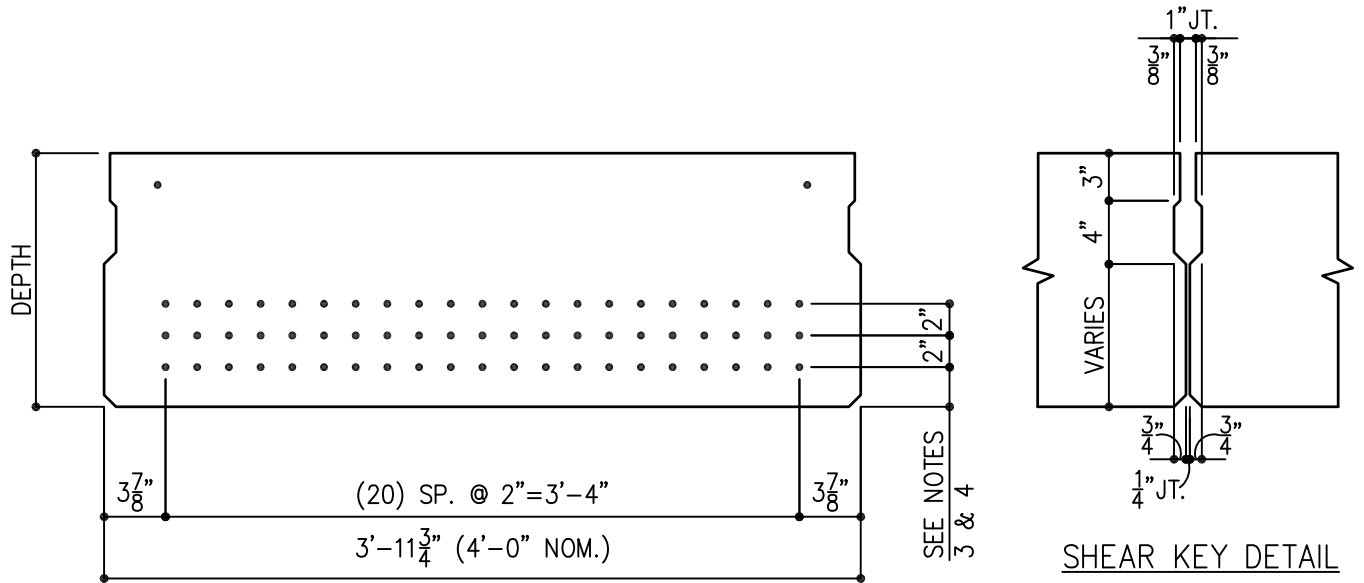
AASHTO GIRDERS

SHEET:

A-II



HAWAII BRIDGE PLANK



NOTES:

1. STANDARD BRIDGE PLANK SECTIONS ARE AVAILABLE IN 2" INCREMENTS FROM 10" THICK. SIMILAR SECTIONS ARE UTILIZED FOR WHARF DECK UNITS.
2. SHEAR KEY DETAIL IS STANDARDIZED FOR ALL SECTIONS AND BASED ON AASHTO/PCI STANDARDS.
3. POSSIBLE STRAND LOCATIONS ARE INDICATED IN BOTTOM ROW. SUBSEQUENT ROWS ARE AT 2" SPACING. CONSULT GPRM Prestress FOR ALTERNATE PRESTRESS OPTIONS.
4. CENTROID OF BOTTOM STRAND IS GOVERNED BY COVER, REINFORCING AND TOLERANCE REQUIREMENTS. 2 1/4" IS THE RECOMMENDED MINIMUM.
5. VOIDED PLANKS SHOULD BE CONSIDERED FOR DEEPER SECTIONS.
6. FOR NON-STANDARD WIDTHS AND SECTIONS CONSULT GPRM Prestress FOR OPTIONS.

SECTION PROPERTIES

DEPTH	A in ²	I in ⁴	Y _b in	Y _t in	S _b in ³	S _t in ³	Vol/ Surf.	WT plf
10"	469	4000	5.0	5.0	800	800	4.1	505
12"	565	6912	5.97	6.03	1152	1152	4.8	608
14"	660	10976	6.97	7.03	1568	1568	5.4	711
16"	756	16384	7.97	8.03	2048	2048	6.0	814
18"	851	23328	8.97	9.03	2592	2592	6.5	916
20"	947	32000	9.97	10.03	3200	3200	7.1	1019
22"	1042	42592	10.97	11.03	3872	3872	7.5	1122
24"	1138	55296	11.94	12.06	4608	4608	8.0	1225

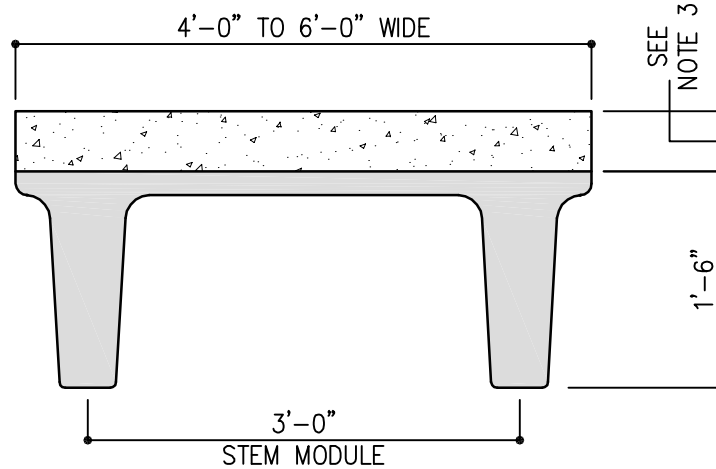
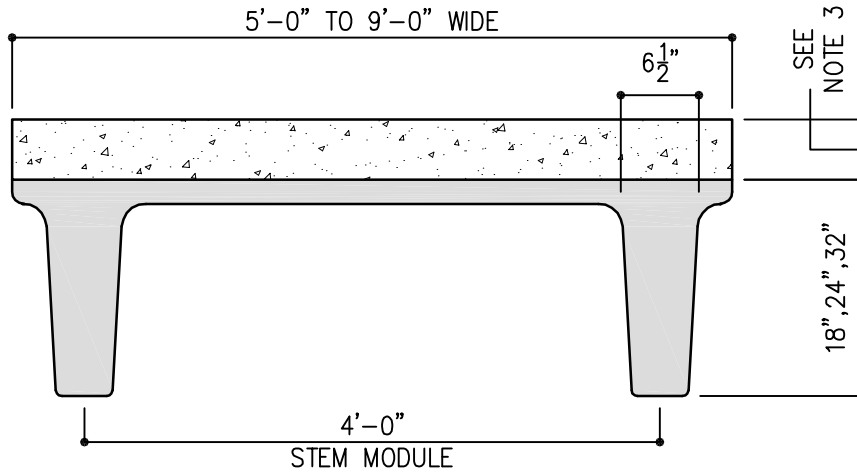
ISSUED:
REVISD:

HAWAII BRIDGE PLANK

SHEET:
BP



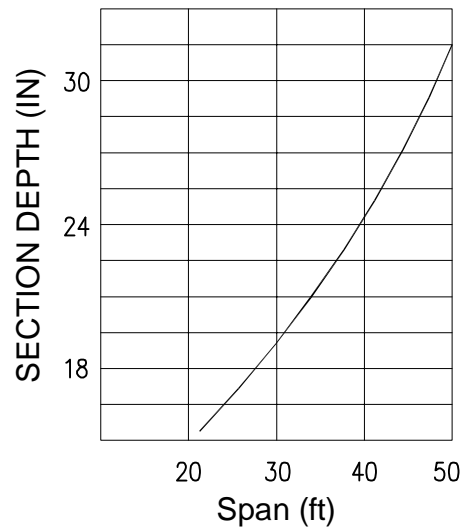
" T " SECTION (EX 8DT)
" T " SECTION (EX 9TT)



NOTES:

1. "T" SECTIONS CAN PROVIDE VERY ECONOMICAL SOLUTIONS FOR SHORT SPAN AND SECONDARY TRAFFIC APPLICATIONS.
2. SEE 8DT AND 9TT DATA SHEETS FOR DIMENSIONS.
3. TOPPING THICKNESS PER APPLICATION, USUALLY 5" TO 6".
4. PREFINISHED UNITS WITH AN INTEGRAL DECK CAN BE PROVIDED FOR SPECIFIC APPLICATIONS SUCH AS ACCESS AND PEDESTRIAN BRIDGES.
5. APPROX SECTION DEPTH TO SPANS ARE SHOWN FOR HS-20 LOADING.

SECTION DEPTH/SPAN:



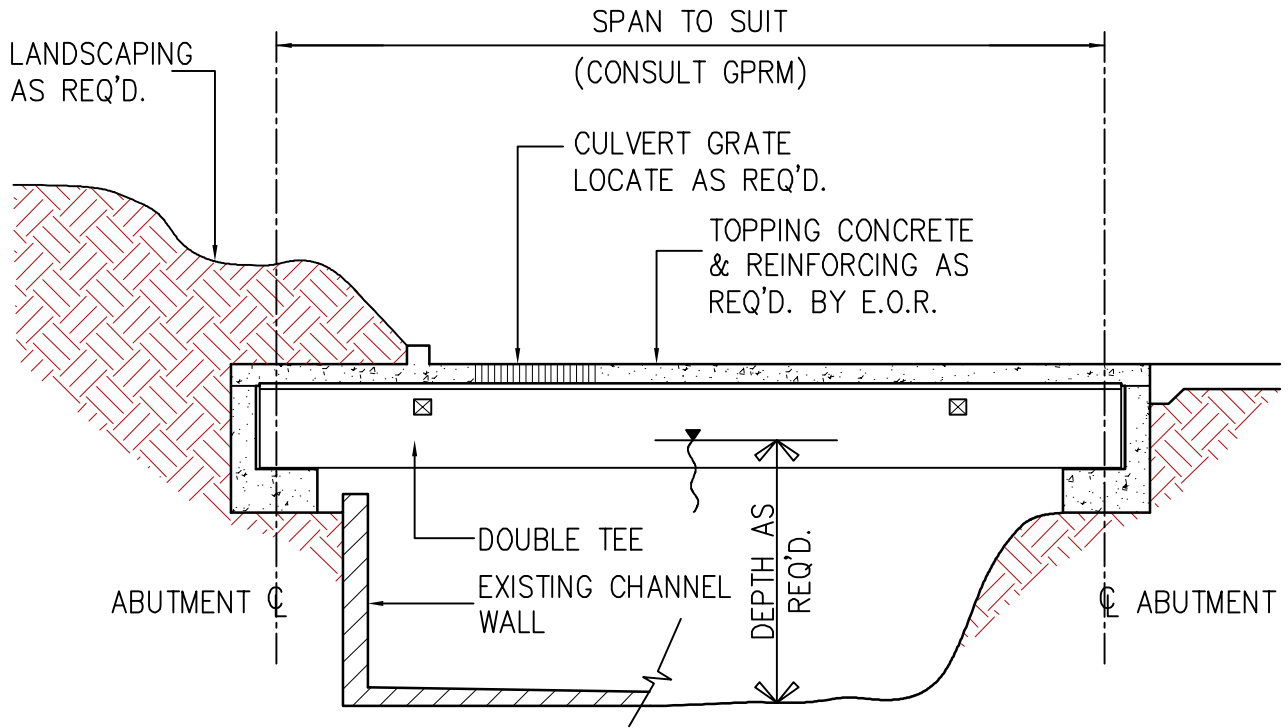
ISSUED:

REVISED:

"T" BRIDGE SECTIONS

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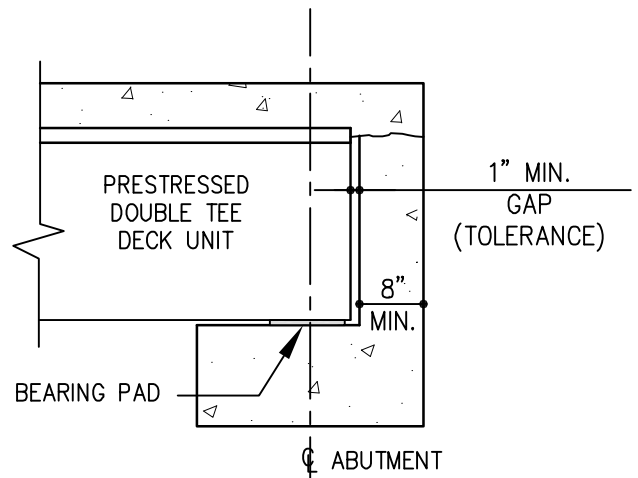
M1



INFILTRATOR CHANNEL/SECTION

NOTES:

1. Drainage channels or open infiltrators can be economically spanned using Double Tee sections. These are usually designed for HS-20 loads, or applicable landscaping.
2. Spans of up to 50ft can be achieved with these sections for HS-20 loads.
3. The sections can span directly to the channel wall for new construction. Spanning existing channels requires new abutment supports.
4. Advantages include no failures due to repetitive and heavy loads in traffic areas, sediment free drainage, and reduced area for catchment of runoff.



ABUTMENT DETAIL

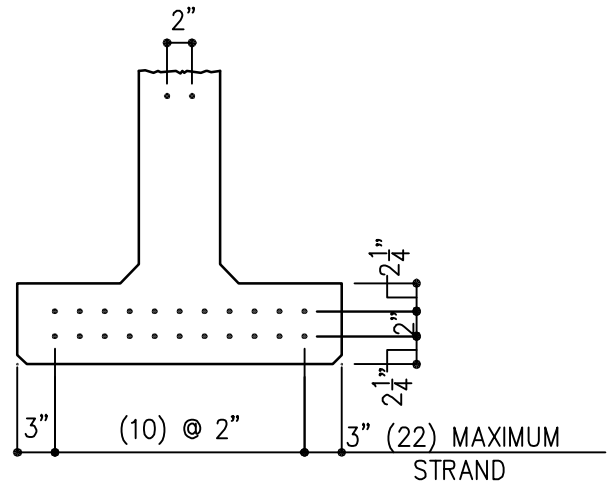
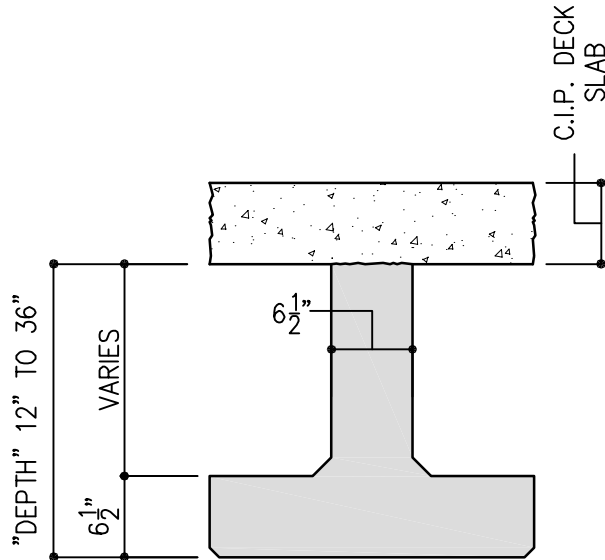
ISSUED:

STORMWATER INFILTRATOR DRAINAGE CHANNEL

SHEET:

M2

REVISED:

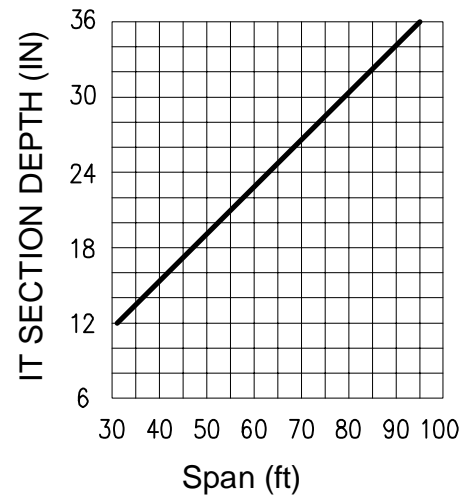


STRAND LAYOUT

NOTES:

1. THE INVERTED "T" (IT) BRIDGE SECTION PROVIDES A LIGHTWEIGHT, ECONOMICAL ALTERNATIVE FOR SHORT TO MEDIUM SPAN BRIDGES THAT MAY HAVE DEPTH CONSTRAINTS OR EQUIPMENT ACCESS ISSUES.
2. THE IT SECTION IS STABLE AND EASY TO HANDLE WITH RELATIVELY SMALL EQUIPMENT, MAKING IT IDEAL FOR SOME OF THE MORE REMOTE LOCATIONS IN THE ISLANDS.
3. THE DEPTH/SPAN TABLE REPRESENTS ADJACENT UNITS WHICH FORM A CONTINUOUS SOFFIT TO THE BRIDGE. UNITS MAY BE SEPARATED BY SMALL AMOUNT AS MAY BE NEEDED TO ACCOMMODATE DECK FRAMING.
4. SUGGESTED REINFORCING DETAILS CAN BE PROVIDED ON REQUEST.

SECTION DEPTH/SPAN:



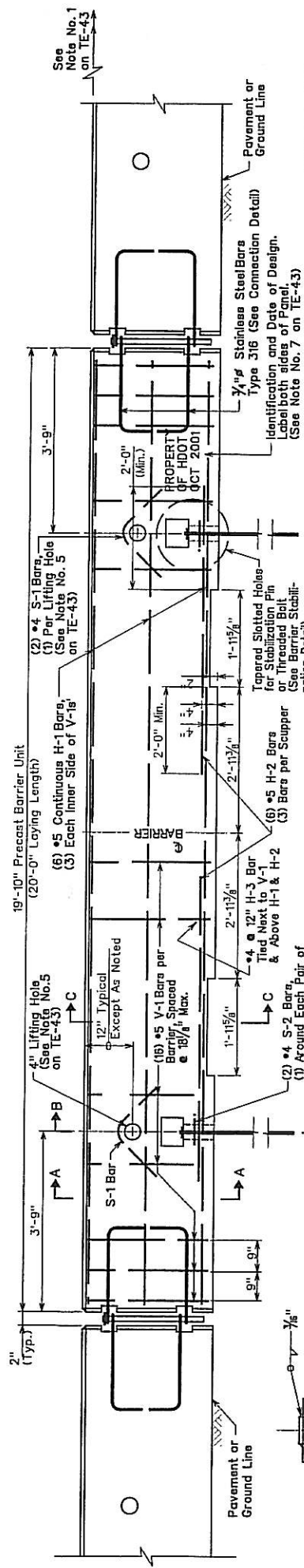
ISSUED:

REVISED:

IT BRIDGE

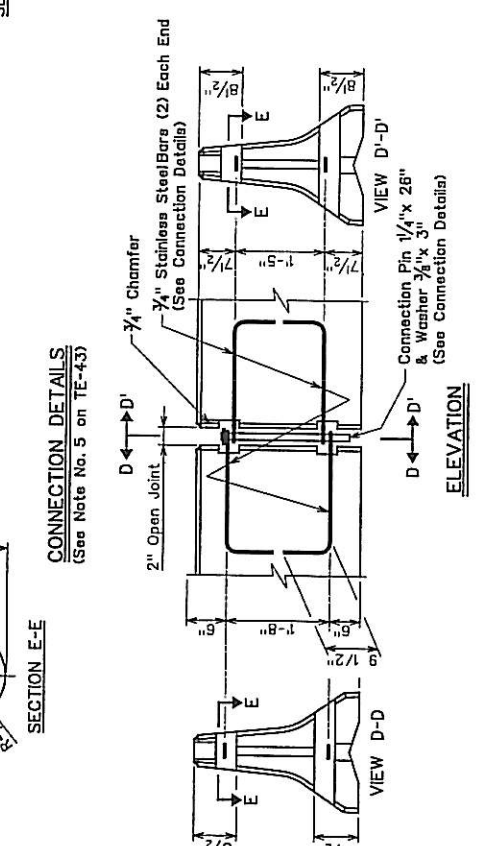
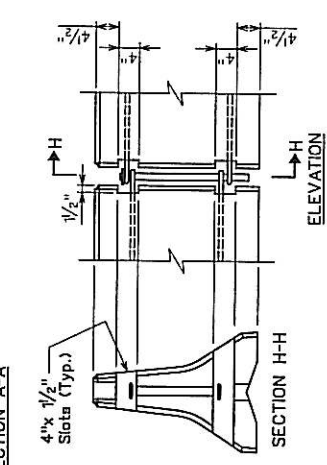
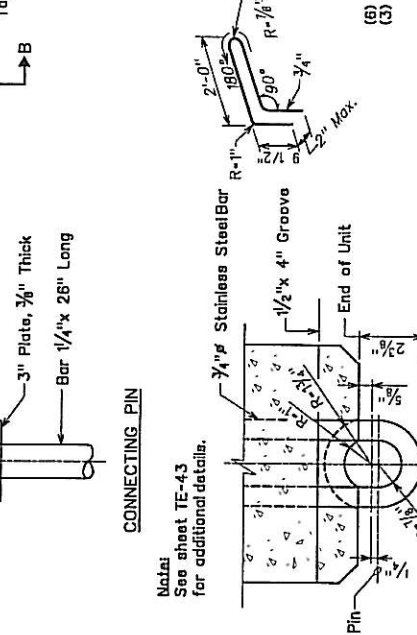
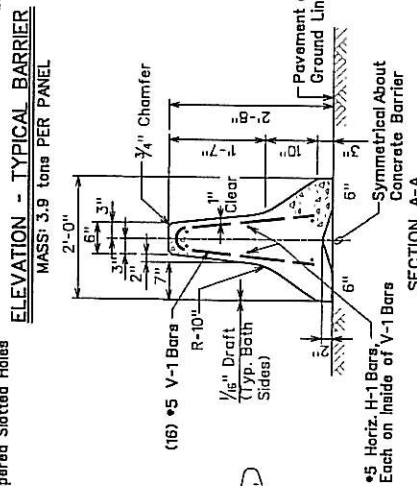
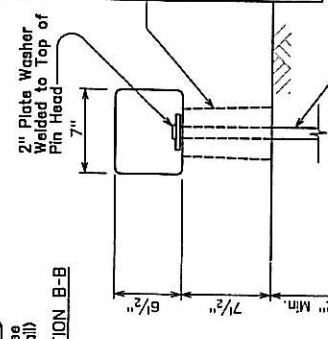
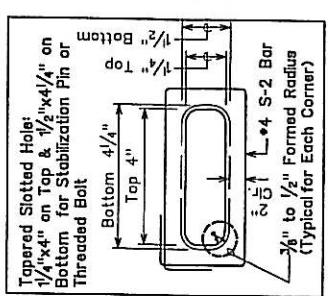
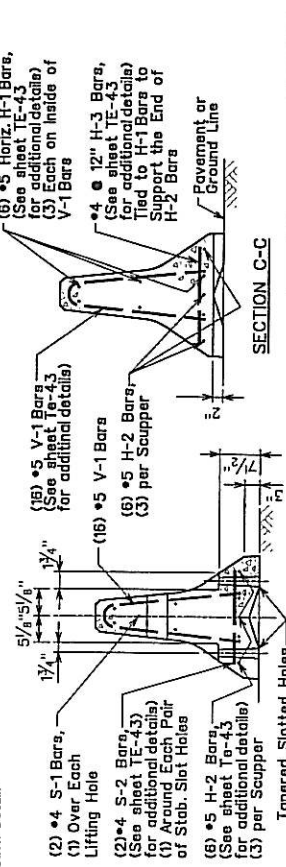
SHEET:

M3



ELEVATION - TYPICAL PANEL

MASS: 3.9 tons PER PANEL

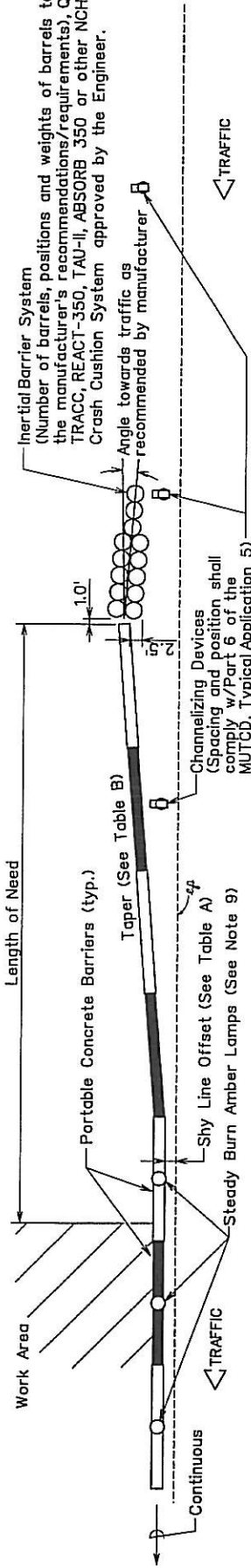


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLAN TE-42

PORTABLE CONCRETE BARRIER

DATE	REVISION	APP'D.
00/00/00	X	



TYPICAL DETAIL - PORTABLE CONCRETE BARRIER END TREATMENT

- NOTES:**
1. For end treatment, layout, crash cushions and where needed see Project Plans or Special Provisions.
 2. Barriers must be pinned together and cannot exceed the Table of Maximum Tapers.
 3. The concrete barrier "Standard Installation" design allows for 3'-3" of outward lateral movement if the barrier is struck, under NCHRP 350, TL-3 condition. Barrier installations that require less than the 3'-3" of outward lateral movement should have stabilization pins.
 4. ASTM A-36 steel shall be used for the connection pin, connection loops and stabilization pins. A one piece pin with a 3" rounded tip may be used in place of the detailed connection pin if the one piece pin meets ASTM A-36 requirements.
 5. A 4" white PVC sleeve may be used to form the lifting hole and if used the sleeve is to be left in place.
 6. Concrete shall be Class A and reinforcing shall be Grade 60.
 7. Identification and date of design will be as follows:
PROPERTY OF HDOT
OCT 2001

8. Text letters and numbers shall be shown as on Standard Plan Sht. No. B-01. "PROPERTY OF HDOT" may be changed depending upon ownership. All Portable Concrete Barriers made for HDOT will be subject to rejection if "PROPERTY OF HDOT" is not imprinted. The Contractor shall bear the cost of the rejected Portable Concrete Barriers. "OCT 2001" denotes a specific design. DO NOT change to reflect manufacturing date.
9. Minimum tangent length for portable Concrete Barrier System shall be 100' (5 units). This minimum does not include the required system length of the Inertial Barrier System.
10. Install steady burn amber lamps on portable concrete barriers @ 20.0' o.c. installing, maintaining and removing each steady burn amber lamp including changing of batteries and bulbs shall be considered incidental to applicable portable concrete barrier items.

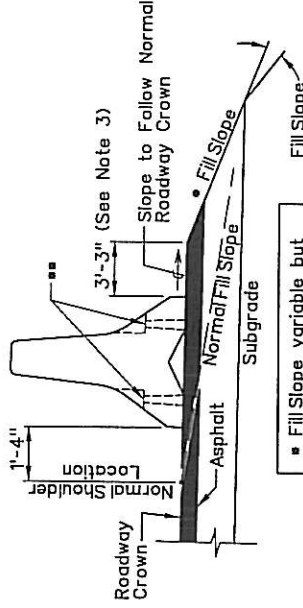


TABLE B
MAXIMUM TAPERS FOR CONCRETE BARRIER

DESIGN SPEED (mph)	TAPER	
	INSIDE SHY LINE	BEYOND SHY LINE
70	30:1	20:1
65	28:1	19:1
60	26:1	18:1
55	24:1	16:1
50	21:1	14:1
45	18:1	12:1
40	17:1	11:1
35	15:1	9:1
≤30	13:1	8:1

TABLE A
SHY LINE OFFSETS

DESIGN SPEED (mph)	SHY LINE OFFSETS
70	10.0'
65	9.0'
60	8.5'
55	7.0'
50	6.5'
45	6.0'
40	5.0'
35	4.5'
30	3.5'
≤25	2.0'

Note: Minimum shy line offset for tangent sections shall be 2'-0".

MARK	LOCATION	BAR SIZE (NO. BARS)	SKETCH
H-1	Horizontal in Barrier Tied Inside V-1 Bars	#5 (6)	19'-3"
H-2	Centered Above Scupper Long. & Transversely	#5 (6)	6'-6"
H-3	Tied Above H-1 Bars to Support H-2, Tied to V-1	#4 (2)	1'-6"
S-1	Horizontal in Top of Wing Wall & in Floor Back Wall	#4 (2)	
S-2	Horizontal Around Slots Between V-1's @ Scupper	#4 (2)	
V-1	Vertical in Barrier (3) Each End & (2) at Each Scupper	#5 (16)	

STATE OF IOWA
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLAN TE-43
PORTABLE CONCRETE BARRIER

DATE	REVISION	APP'D.
00/00/00 X		