

LONGITUDINAL SECTION

#5 BARS PLACED PARALLEL TO R/L
SPACING PERPENDICULAR TO R/L

NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

PARAPETS, SIDEWALKS, AND MEDIANS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED. (FOR NON-STAGED CONSTRUCTION)

SLAB SUPPORTING FALSEWORK SHALL REMAIN IN-PLACE UNTIL ALL STAGES OF THE SUPERSTRUCTURE HAS CURED. FOR DEFLECTION CONTROL BETWEEN STAGES. DO NOT RELEASE ANY FALSEWORK UNTIL PARAPETS, SIDEWALKS, AND MEDIANS HAVE CURED. (FOR STAGED CONSTRUCTION)

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, THE C/L OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD ELEVATIONS ON AS BUILT PLANS. SEE STD. 18.03

DESIGNER NOTES

THE MAXIMUM ALLOWABLE SKEW ANGLE OF STRUCTURE SHALL BE 30°.

ALL BAR SPLICES TO BE BASED ON "CLASS C" TENSION LAP SPLICE.

USE OPTIONAL LONGITUDINAL JOINTS WHEN OVERALL SLAB WIDTH IS OVER 52'-0". SEE STANDARD 18.02 FOR DETAIL.

FOR BRIDGES LOCATED IN REMOTE AREAS USE OPTIONAL TRANSVERSE JOINT WHEN POUR EXCEEDS 400 C.Y. PLACE KEVED JOINT NEAR POINT OF DEAD LOAD INFLECTION.

ALL TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE PLACED ON THE SKEW.

FLOOR DRAINS ARE TO BE OMITTED FROM SLAB STRUCTURES WHERE POSSIBLE. IF FLOOR DRAINS ARE REQUIRED, PLACE KEVED AT THE 2/10 AND 8/10 PTS. BEND MAIN REBARS PAST DRAINS - DO NOT CUT.

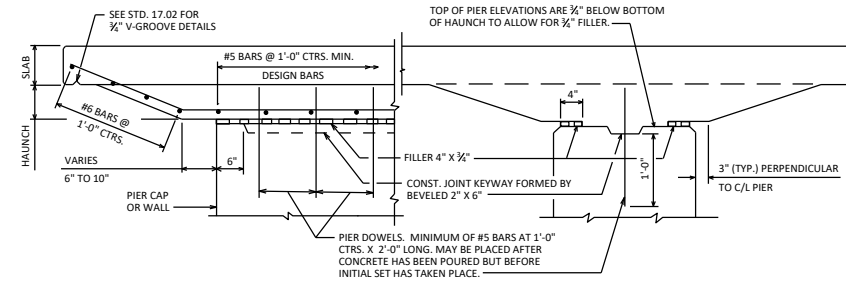
PIER CAP OR WALL TYPE PIERS SHALL BE USED ON MOST STRUCTURES. "COLUMN WITHOUT CAP" TYPE PIERS MAY BE USED WITH THE APPROVAL OF THE STRUCTURES DESIGN SECTION.

ON THE PLANS, PROVIDE CAMBER VALUES AT THE TENTH POINTS OF ALL SPANS. ALSO PROVIDE TOP OF SLAB ELEVATIONS AT THE REFERENCE LINE (OR CROWN) AND OUTSIDE EDGES OF SLAB AT TENTH POINTS. SEE STD. 18.03

TRANSVERSE TAPERED HAUNCHES MAY BE USED TO ELIMINATE A COLUMN (PROVIDED A MINIMUM OF 3 COLUMNS ARE USED), OR FOR AESTHETICS.

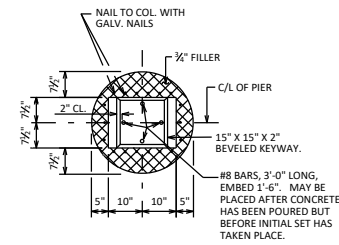
PAVING NOTCH IS 1'-0" WIDE BY 1'-4" DEEP IF STRUCTURAL APPROACH SLAB (STD. 12.10) IS USED.

REINFORCEMENT IN SLAB MUST MEET TEMPERATURE AND SHRINKAGE REQUIREMENTS.

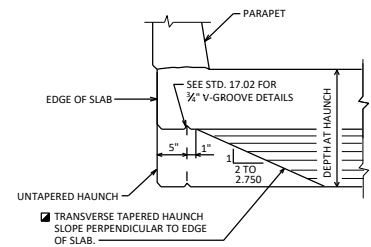


PIER CAP OR WALL TYPE PIER

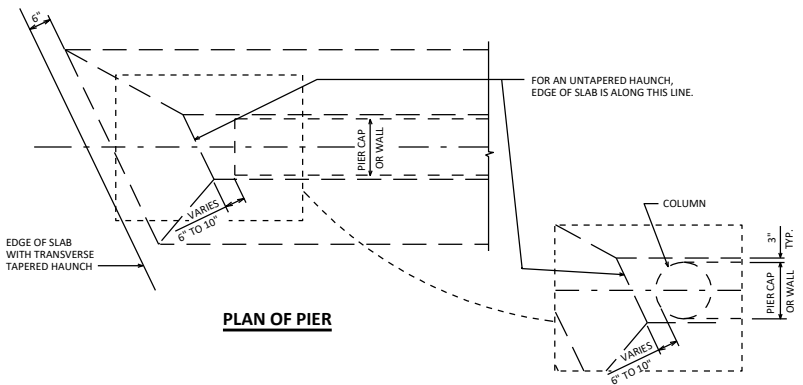
SHOWING TRANSVERSE TAPERED HAUNCH



**COLUMN W/O CAP TYPE PIER
DETAIL AT TOP OF COLUMN**



**TAPERED/UNTAPERED HAUNCH
CROSS SECTION**



PLAN OF PIER

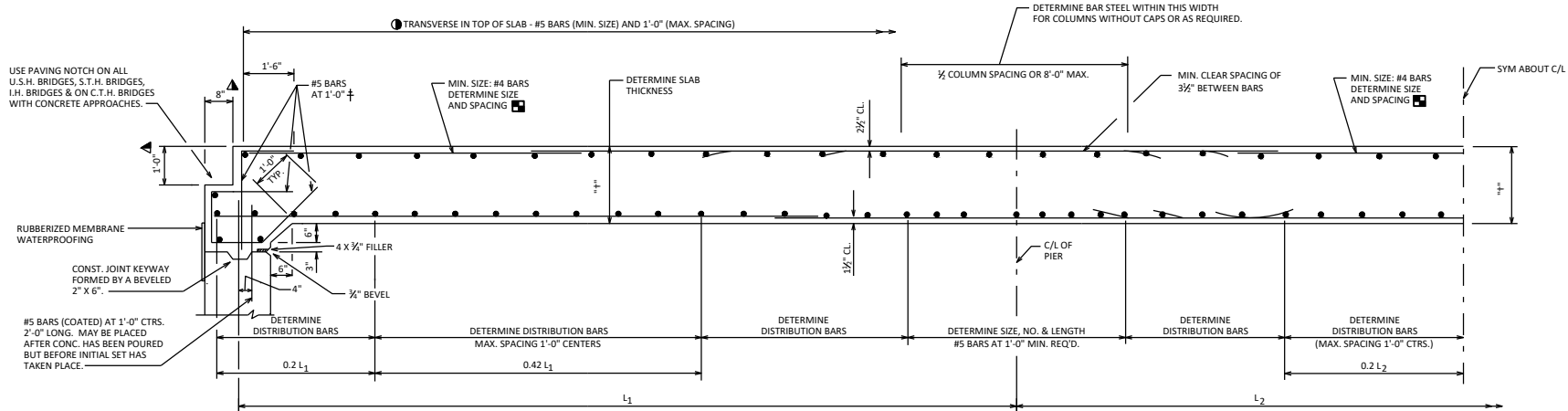
TOP TRANSVERSE REINF. FOR RAILINGS/PARAPETS		
SINGLE SLOPE OR SLOPED FACE PARAPETS	MAIN BARS RUN FROM EDGE TO EDGE OF SLAB	SHORT BARS PLACED BETWEEN MAIN BARS AT EDGE OF SLAB
SLAB THICK. ≥ 15"	(#5 @ 1'-0")	(#5 @ 1'-0") 5'-0" LONG NO HOOK REQ'D. AT END
13" ≤ SLAB THICK. < 15"	(#5 @ 10")	(#5 @ 10") 5'-0" LONG STD. HOOK REQ'D. AT END
STEEL RAILINGS TYPE "NY"/"M"/"W"	TOP TRANSVERSE REINF. SPECIFIED IN "LONGIT. SECTION" IS ADEQUATE	

CONTINUOUS HAUNCHED SLAB



APPROVED: *Laura Shadewald*

DATE: 7-23

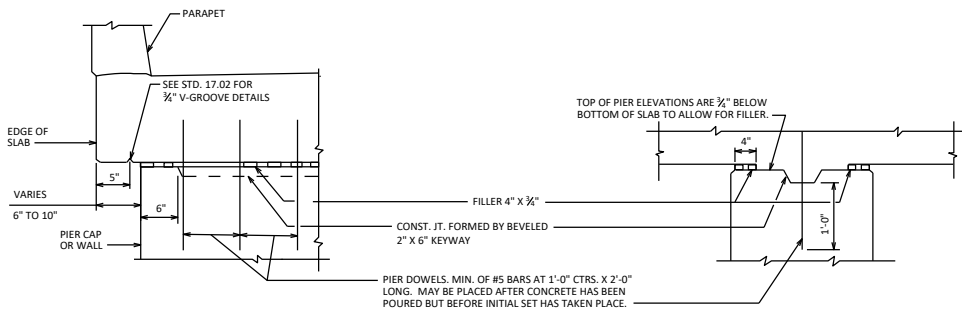


HALF LONGITUDINAL SECTION

‡ BARS PLACED PARALLEL TO R/L
SPACING PERPENDICULAR TO R/L

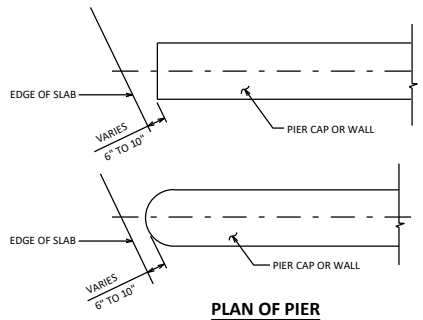
NOTES

- TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.
- ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).
- PARAPETS, SIDEWALKS, AND MEDIANS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED. (FOR NON-STAGED CONSTRUCTION)
- SLAB SUPPORTING FALSEWORK SHALL REMAIN IN PLACE UNTIL ALL STAGES OF THE SUPERSTRUCTURE HAS CURED, FOR DEFLECTION CONTROL BETWEEN STAGES. DO NOT RELEASE ANY FALSEWORK UNTIL PARAPETS, SIDEWALKS, AND MEDIANS HAVE CURED. (FOR STAGED CONSTRUCTION)
- CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
- PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, THE C/L OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD ELEVATIONS ON AS BUILT PLANS. SEE STD. 18.03

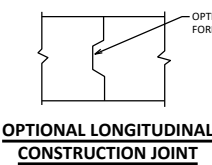


PIER CAP OR WALL TYPE PIER

SEE STD. 18.01 FOR COLUMN W/O CAP PIER DETAIL.



PLAN OF PIER



OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

TOP TRANSVERSE REINF. FOR RAILINGS/PARAPETS		
SINGLE SLOPE OR SLOPED FACE PARAPETS	MAIN BARS RUN FROM EDGE TO EDGE OF SLAB	SHORT BARS PLACED BETWEEN MAIN BARS AT EDGE OF SLAB
SLAB THICK. ≥ 15"	(#5 @ 1'-0")	(#5 @ 1'-0") 5'-0" LONG NO HOOK REQ'D. AT END
13" ≤ SLAB THICK. < 15"	(#5 @ 10")	(#5 @ 10") 5'-0" LONG STD. HOOK REQ'D. AT END
STEEL RAILINGS TYPE "NY"/"M"/"W"		TOP TRANSVERSE REINF. SPECIFIED IN "LONGIT. SECTION" IS ADEQUATE

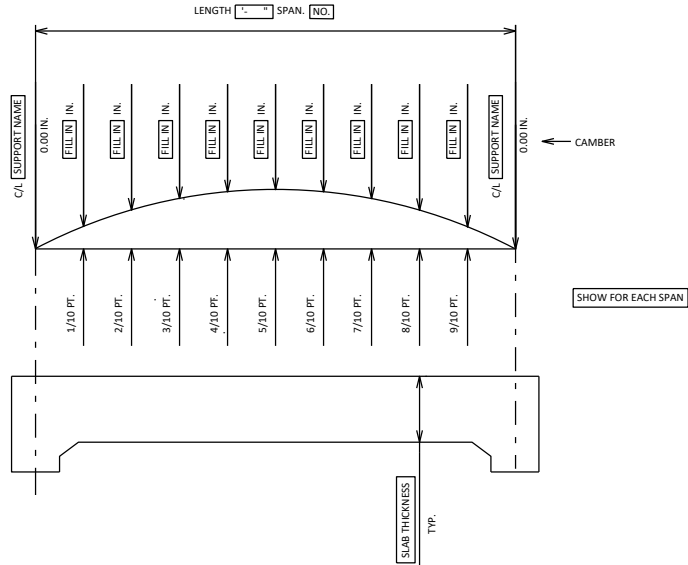
DESIGNER NOTES

- THE MAXIMUM ALLOWABLE SKEW ANGLE OF STRUCTURE SHALL BE 30°.
- ALL BAR SPLICES TO BE BASED ON "CLASS C" TENSION LAP SPLICE.
- USE OPTIONAL LONGITUDINAL JOINTS WHEN OVERALL SLAB WIDTH IS OVER 52'-0".
- FOR BRIDGES LOCATED IN REMOTE AREAS USE OPTIONAL TRANSVERSE JOINT WHEN POUR EXCEEDS 400 C.Y. PLACE KEYS JOINT NEAR POINT OF DEAD LOAD INFLECTION.
- ALL TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE PLACED ON THE SKEW.
- FLOOR DRAINS ARE TO BE OMITTED FROM SLAB STRUCTURES WHERE POSSIBLE. IF FLOOR DRAINS ARE REQUIRED, PLACE ONLY AT THE 2/10 AND 8/10 PTS. BEND MAIN REBARS PAST DRAINS - DO NOT CUT.
- PIER CAP OR WALL TYPE PIERS SHALL BE USED ON MOST STRUCTURES. "COLUMN WITHOUT CAP" TYPE PIERS (SEE STD. 18.01) MAY BE USED WITH THE APPROVAL OF THE STRUCTURES DESIGN SECTION.
- ON THE PLANS, PROVIDE CAMBER VALLIES AT THE TENTH POINTS OF ALL SPANS. ALSO PROVIDE TOP OF SLAB ELEVATIONS AT THE REFERENCE LINE (OR CROWN) AND OUTSIDE EDGES OF SLAB AT TENTH POINTS. SEE STD. 18.03
- PAVING NOTCH IS 1'-0" WIDE BY 1'-4" DEEP IF STRUCTURAL APPROACH SLAB (STD. 12.10) IS USED.
- REINFORCEMENT IN SLAB MUST MEET TEMPERATURE AND SHRINKAGE REQUIREMENTS.

CONTINUOUS FLAT SLAB



APPROVED: *Laura Shadewald* DATE: 7-23



CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTION.

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

- SELECT ONE
- PARAPETS, SIDEWALKS, AND MEDIANS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED. (FOR NON-STAGED CONSTRUCTION)
 - SLAB-SUPPORTING FALSEWORK SHALL REMAIN IN-PLACE UNTIL ALL STAGES OF THE SUPERSTRUCTURE HAS CURED, FOR DEFLECTION CONTROL BETWEEN STAGES. DO NOT RELEASE ANY FALSEWORK UNTIL PARAPETS, SIDEWALKS, AND MEDIANS HAVE CURED. (FOR STAGED CONSTRUCTION)

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

- TOP OF SLAB ELEVATION AT FINAL GRADE
- MINUS..... SLAB THICKNESS
- PLUS..... CAMBER
- PLUS..... FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
- EQUALS = TOP OF SLAB FALSEWORK ELEVATION

SURVEY TOP OF SLAB ELEVATIONS

SHOW FOR EACH SPAN

	C/L BRG. SUPPORT NAME	5/10 PT.	C/L BRG. SUPPORT NAME
<input type="checkbox"/> GUTTER			
<input type="checkbox"/> CROWN AND/OR R/L			
<input type="checkbox"/> GUTTER			

EDGE OF SLAB ☆ (FOR SIDEWALK OR OPEN RAILING APPLICATIONS)

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, THE C/L OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NOTES

FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" FOR EACH SPAN ON AS BUILT PLANS.

☆ EDGE OF SLAB ELEVATION IS THE TOP OUTER EDGE OF THE SLAB BENEATH SIDEWALK. (FOR SIDEWALK OR OPEN RAILING APPLICATIONS)

DESIGNER NOTES

PROVIDE A "CAMBER AND SLAB THICKNESS DIAGRAM" AND TABLE OF "TOP OF SLAB ELEVATIONS" FOR EACH SPAN ON CONTRACT PLANS.

INCLUDE THE "SURVEY TOP OF SLAB ELEVATIONS" TABLE ON THE CONTRACT PLANS SO THAT IT MAY BE FILLED IN DURING CONSTRUCTION. TO VERIFY CAMBER, SURVEY LOCATIONS SHALL CORRESPOND WITH THE TABLE OF "TOP OF SLAB ELEVATIONS".

FOR BRIDGES WITH R/L LINE NOT ON THE CROWN, PROVIDE ELEVATIONS AT BOTH LOCATIONS.

TOP OF SLAB ELEVATIONS

SHOW FOR EACH SPAN

	C/L BRG. SUPPORT NAME	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	C/L BRG. SUPPORT NAME
<input type="checkbox"/> GUTTER											
<input type="checkbox"/> CROWN AND/OR R/L											
<input type="checkbox"/> GUTTER											

EDGE OF SLAB ☆ (FOR SIDEWALK OR OPEN RAILING APPLICATIONS)

CONCRETE SLAB DETAILS



APPROVED: *Laura Shadewald*

DATE:
7-23