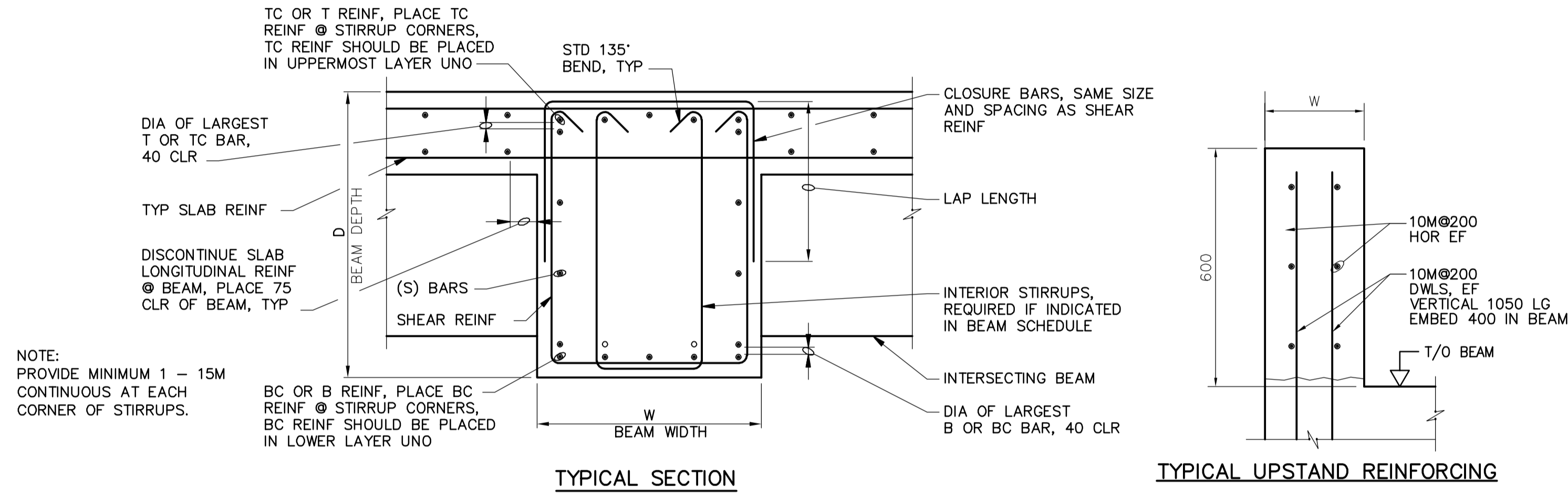


NOTES:

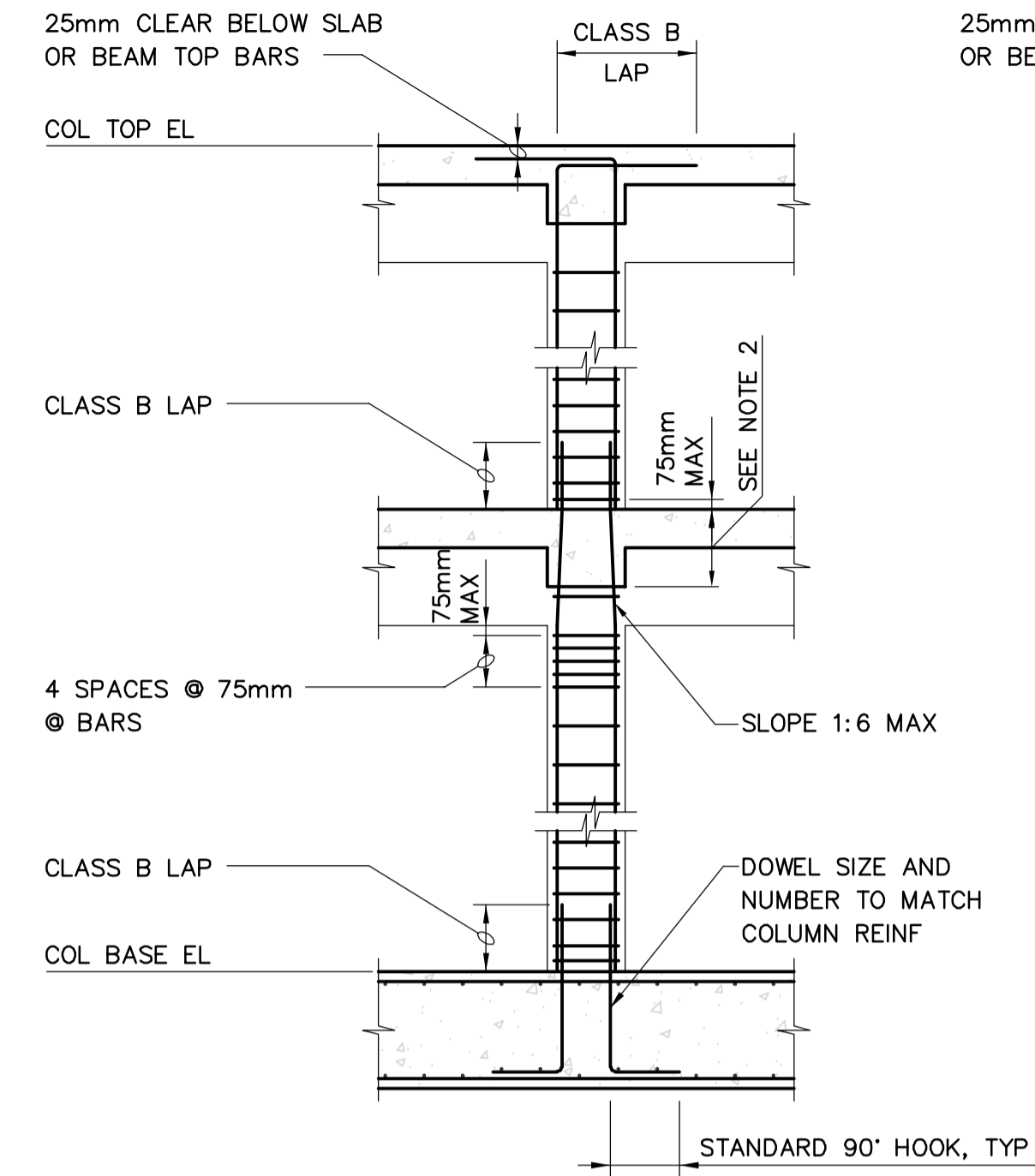
- PLACE TOP (T & TC) AND BOTTOM (B & BC) BARS IN MULTIPLE ROWS ONLY WHERE INDICATED IN SCHEDULE.
- WHEN INDICATED IN BEAM SCHEDULE, SUBSTITUTE CLOSED TIES (□) FOR STIRRUPS AND CLOSURE BARS SHOWN (□).

BEAM REINFORCING
N.T.S.

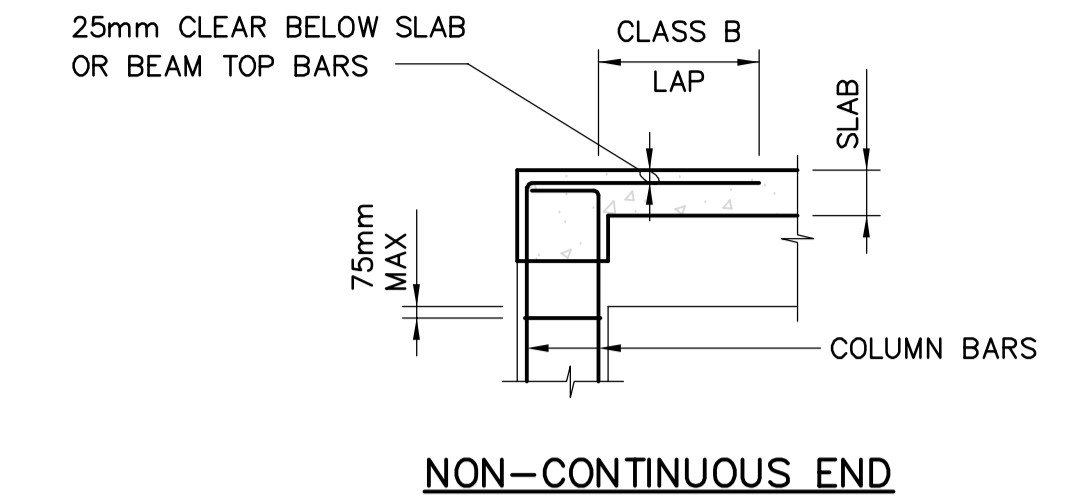


BEAM NO. (SEE PLANS)	SIZE		TOP REINF AT LEFT SUPPORT		BOTTOM REINF		* TOP REINF AT RIGHT SUPPORT		S BARS	SHEAR REINF (MM)		REMARKS
	W	D	T	TC	B	BC	T	TC		NO. SIZE	SPACING	
BM1												NOT USED
BM2	300	600	-	3-30M	-	3-30M	-	3-30M	-	1-10M	300	-
BM3	400	600	-	5-30M	-	4-30M	-	5-30M	-	1-10M	300	-
BM4	400	800	-	6-30M	-	5-30M	-	6-30M	2-15M	1-10M	300	TC & BC BARS IN 2 LAYERS W/ UPSTAND
BM4A	400	800	-	6-30M	-	5-30M	-	6-30M	2-15M	1-10M	300	THE SPACING @ 150mm FOR DISTANCE OF 1500mm FROM EACH SIDE OF COL, TC&BC BARS IN 2 LAYERS
BM4B	400	800	-	5-35M	-	6-30M	-	5-35M	2-15M	1-10M	300	THE SPACING @ 150mm FOR DISTANCE OF 1500mm FROM EACH SIDE OF COL, W/ UPSTAND, TC&BC BARS IN 2 LAYERS
BM5	400	1000	-	6-30M	-	6-30M	-	6-30M	3-15M	1-10M	300	TC & BC BARS IN 2 LAYERS W/ UPSTAND
BM6	400	600	-	6-30M	-	5-30M	-	6-30M	-	1-10M	300	THE SPACING @ 150mm FOR DISTANCE OF 1500mm FROM EACH SIDE OF COL, W/ UPSTAND, TC&BC BARS IN 2 LAYERS
BM6A	400	800	-	3-20M	-	3-20M	-	3-20M	2-15M	1-10M	300	-
BM7	400	600	-	3-30M	-	3-30M	-	3-30M	2-15M	1-10M	300	W/ UPSTAND
BM7A	400	600	-	3-30M	-	3-30M	-	3-30M	2-15M	1-10M	300	-
BM8	300	800	-	5-30M	-	4-30M	-	5-30M	2-15M	1-10M	300	-
BM9	400	500	-	4-30M	-	4-30M	-	4-30M	-	1-10M	150	-
BM10	400	1200	-	4-30M	-	6-30M	2-30M	4-30M	4-15M	1-10M	300	BC BARS IN 2 LAYERS W/ UPSTAND
BM11	400	1200	-	4-30M	-	6-30M	2-30M	4-30M	4-15M	1-10M	300	BC BARS IN 2 LAYERS
BM12	400	1200	-	4-30M	-	6-30M	2-30M	4-30M	4-15M	1-10M	300	BC BARS IN 2 LAYERS W/ UPSTAND

BEAM SCHEDULE
N.T.S.



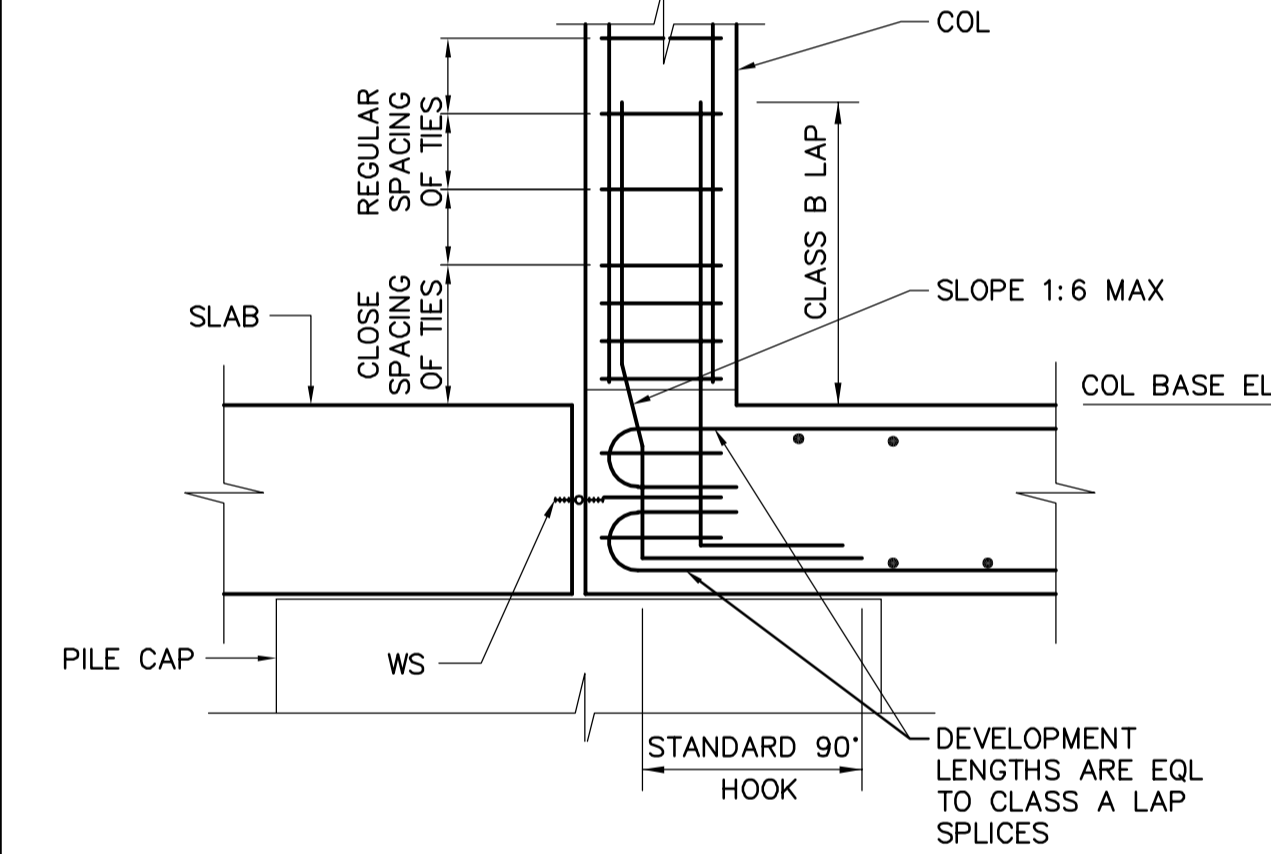
TYPICAL COLUMN BASE REIN W/ WATERSTOP ALONG EXPANSION JOINT
N.T.S.



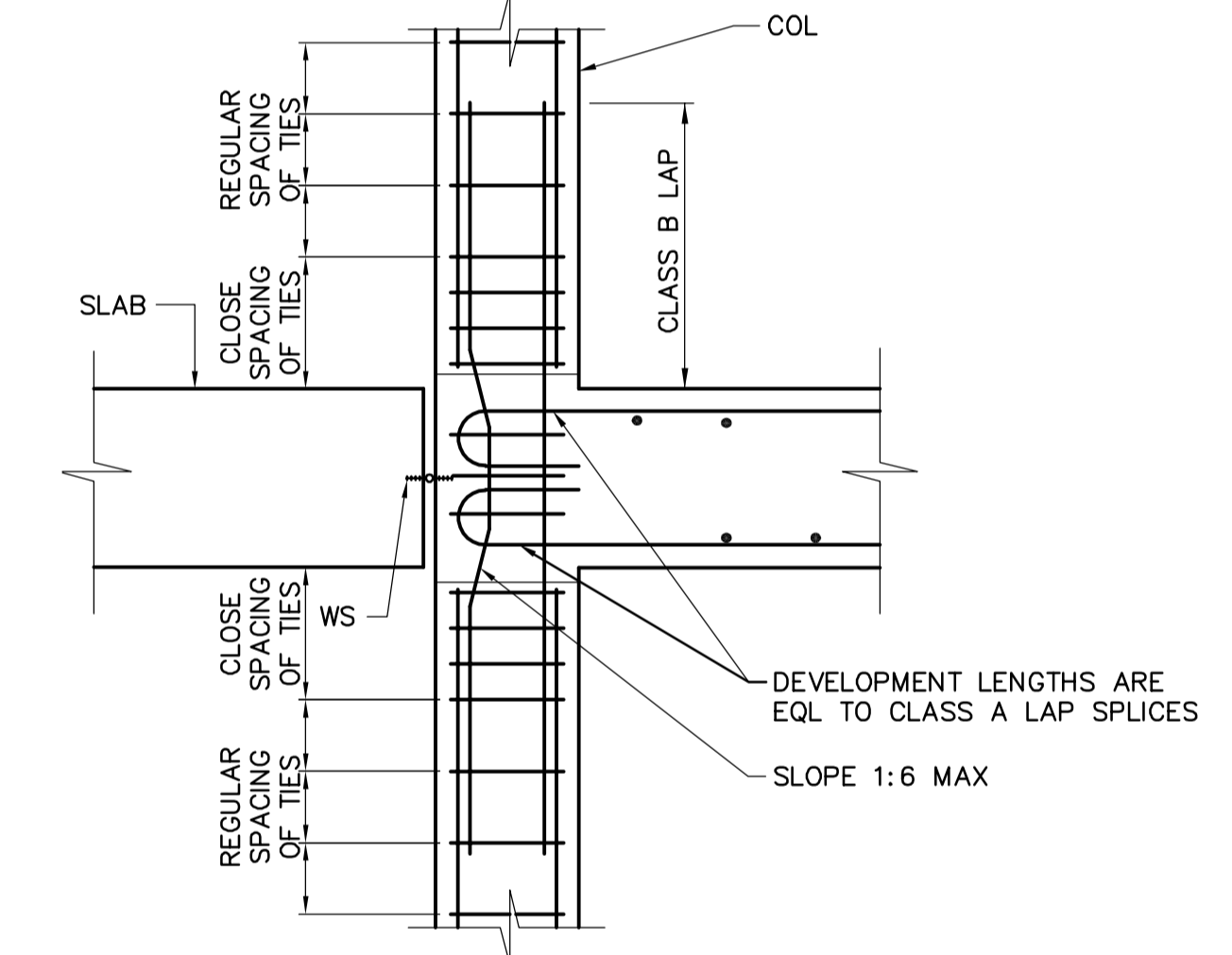
NON-CONTINUOUS END

NOTE:

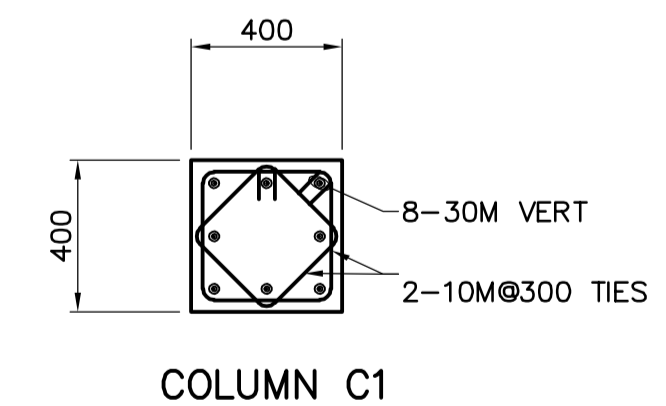
- FOR DIMENSIONS AND REINFORCEMENT SEE COLUMN SCHEDULE.
- CONTINUE TIES AT SPACING NOTED THROUGH BEAM CONNECTION ZONE WHERE CONCRETE BEAMS DO NOT FRAME INTO COLUMN ON ALL FOUR SIDES



TYPICAL COLUMN REIN @ FLOOR SLAB W/ WATERSTOP ALONG EXPANSION JOINT
N.T.S.



TYPICAL COLUMN REIN @ FLOOR SLAB W/ WATERSTOP ALONG EXPANSION JOINT
N.T.S.



COLUMN C1

COLUMN REINFORCING
N.T.S.

- * MAINTAIN MAIN COVER OVER TIES PER DETAIL 5/WB-S0451, OFFSET VERTICAL WALL REINFORCING TO INSIDE OF EAST AND WEST LAYERS OF PIER REINFORCING

NOTES:

- * TOP REINFORCING MAY BE CALLED-OUT TWICE IN SCHEDULE. (I.E. "TOP REINFORCING AT RIGHT SUPPORT" OF BEAM THAT IS CONTINUOUS OVER THE RIGHT SUPPORT IS CALLED-OUT AS "TOP REINFORCING AT LEFT SUPPORT" OF ADJACENT BEAM.)
- LEFT SUPPORT IS DESIGNATED AS THE SUPPORT CLOSEST TO THE LEFT SIDE OR BOTTOM OF SHEET ON WHICH FRAMING PLAN IS DRAWN, UNLESS NOTED OTHERWISE ON PLAN.
- FOR CONCRETE BEAM END DETAIL, SEE 3 / WB-S0451

 Certificate of Authorization CH2M HILL Canada Ltd. No. 1441 Expiry: April 30, 2006	B.M. ELEV.	 Frederickson Cooper ARCHITECTS DESIGNED BY RZ DRAWN BY RL SCALE: NTS	 A Geo International Ltd. Company CHECKED BY AP APPROVED BY DJT RELEASED FOR CONSTRUCTION BY: R. SOROKOWSKI	ENGINEER'S SEAL	 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION WATER TREATMENT PLANT FLOCCULATION AND DAF FOUNDATIONS AND CONCRETE STRUCTURES STRUCTURAL FLOC/DAF AREAS COLUMN AND BEAM SCHEDULES	ORIGINAL SIGNED BY D. KRUGER 2006/02/06 CONSULTANT DRAWING NO. WP-S0515	CITY FILE NUMBER	
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								CITY DRAWING NUMBER
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