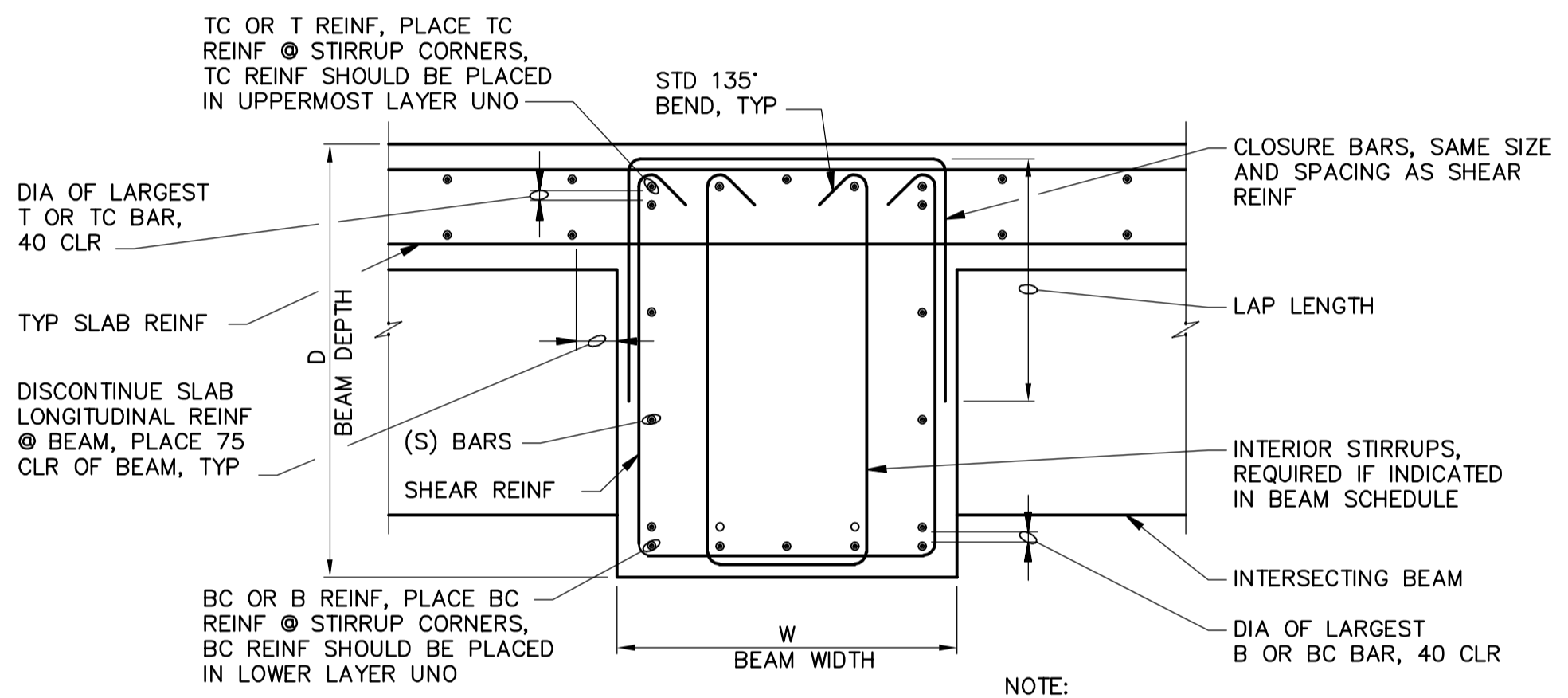


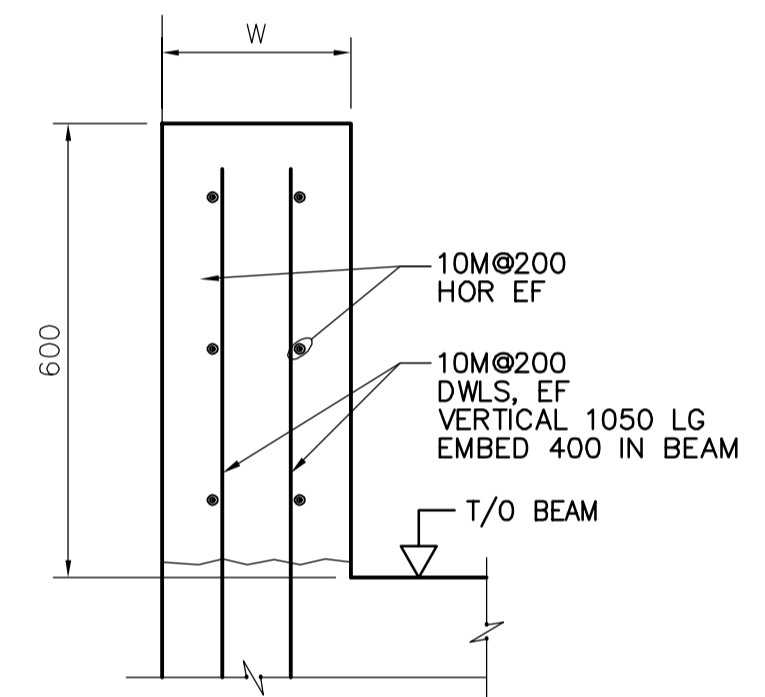
- NOTES:**
1. PLACE TOP (T & TC) AND BOTTOM (B & BC) BARS IN MULTIPLE ROWS ONLY WHERE INDICATED IN SCHEDULE.
  2. WHEN INDICATED IN BEAM SCHEDULE, SUBSTITUTE CLOSED TIES (□) FOR STIRRUPS AND CLOSURE BARS SHOWN (○).

**BEAM REINFORCING**  
N.T.S.



**TYPICAL SECTION**

NOTE: PROVIDE MINIMUM 1 - 15M CONTINUOUS AT EACH CORNER OF STIRRUPS.

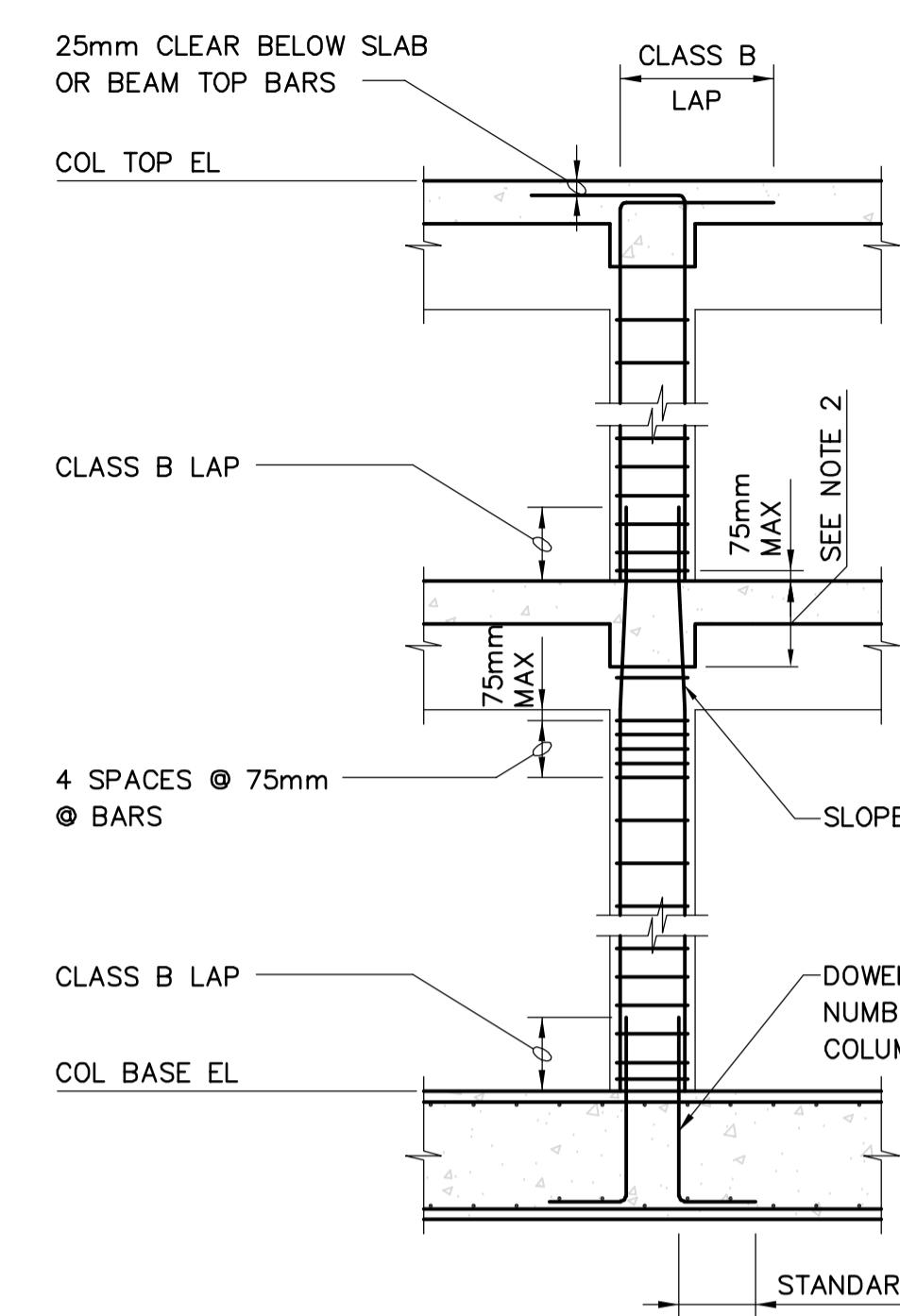


**TYPICAL UPSTAND REINFORCING**

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 FROM LEFT SUPPORT	
BM1	500	750	-	6-30M	-	6-30M	4-30M	6-30M	2-20M	2-10M	200	WITH UPSTAND AT BD & BH
BM2	500	750	4-30M	6-30M	-	6-30M	-	6-30M	2-20M	2-10M	200	WITH UPSTAND AT BD & BH
BM3	500	750	-	4-30M	-	4-30M	-	4-30M	2-15M	2-10M	200	WITH UPSTAND
BM4	500	1200	-	4-30M	2-30M	4-30M	-	4-30M	2-20M	2-10M	200	-
BM5	500	850	-	4-30M	-	4-30M	-	4-30M	2-20M	2-10M	200	-

**BEAM SCHEDULE**  
N.T.S.

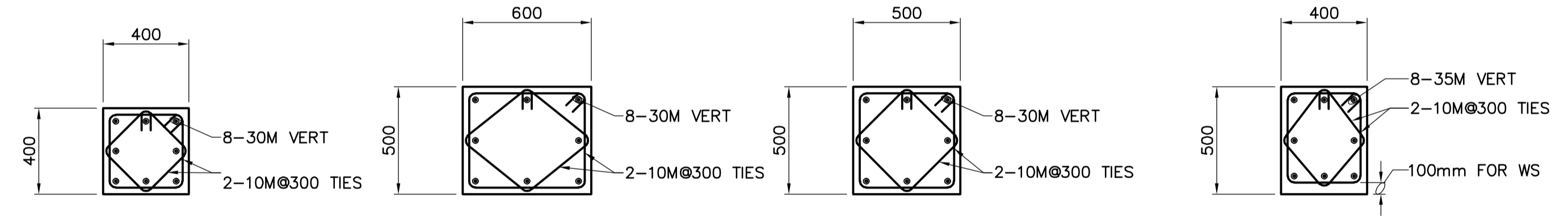
- NOTES:**
1. \* TOP REINFORCING MAY BE CALLED-OUT TWICE IN SCHEDULE. (I.E. "TOP REINFORCING AT RIGHT SUPPORT" OF BEAM THAT IS CONTINUOUS OVER THE RIGHT SUPPORT IS CALLED-OUT AS "TOP REINFORCING AT LEFT SUPPORT" OF ADJACENT BEAM.)
  2. LEFT SUPPORT IS DESIGNATED AS THE SUPPORT CLOSEST TO THE LEFT SIDE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



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



**COLUMN SCHEDULE**  
N.T.S.



B.M. ELEV.					
DESIGNED BY	MH	CHECKED BY	AP	ENGINEER'S SEAL	
DRAWN BY	RL	APPROVED BY	DJT	ORIGINAL SIGNED BY	D. KRUGER
SCALE:	NTS	RELEASED FOR CONSTRUCTION BY:	R. SOROKOWSKI	DATE	2006/02/06
NO. REVISIONS		DATE	2005/09/16	CONSULTANT DRAWING NO.	WO-S0515

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION

WATER TREATMENT PLANT  
OZONE  
FOUNDATIONS AND CONCRETE STRUCTURES

STRUCTURAL  
OZONATION AREA  
COLUMN AND BEAM SCHEDULES

CITY FILE NUMBER  
SHEET OF  
CITY DRAWING NUMBER  
**1-0610-D-80515-001-00D**