

TYPICAL BEDDING DETAILS

(GRANULAR MATERIAL & CONCRETE SURROUND)

NOTES:

1) TYPE A MATERIAL SHALL BE COMPACTED OVER THE FULL WIDTH OF THE TRENCH WITH A PLATE VIBRATOR.

2) TYPE B FILL SHALL BE THOROUGHLY PACKED & RAMMED BY HAND TAMPING IN LAYERS NOT EXCEEDING 150mm TH BEFORE COMPACTION

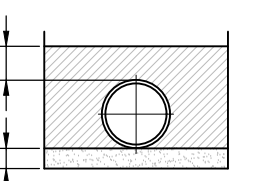
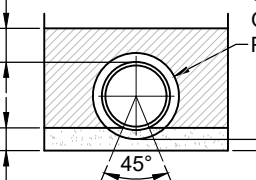
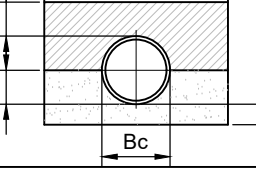
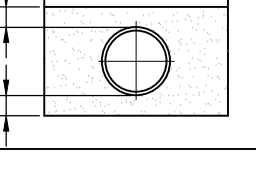
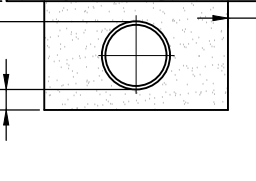
3) ALL DEPTH OF MATERIALS ARE MINIMUM COMPACTED DEPTHS & SHALL EXTEND FOR THE FULL WIDTH OF THE TRENCH

4) ANY SOCKETS SHALL BE NOT LESS THAN 50mm ABOVE THE FLOOR OF THE TRENCH

5) FOR CONCRETE BED & SURROUND PIPES SHALL BE LAID ON A PRE-CAST CONCRETE SETTING BLOCK, TOP FACE OF WHICH SHALL BE COVERED WITH 2 LAYERS OF COMPRESSIBLE PACKING

TRENCH WIDTH		
NOMINAL INTERNAL DIAMETER (mm)	MINIMUM TRENCH WIDTH (mm)	MAXIMUM TRENCH WIDTH (mm)
100	450	550
150	500	600
225	600	700
300	680	750
375	950	1050
450	1030	1150
525	1100	1200
600	1240	1350
675	1330	1450
750	1400	1500
825	1490	1600
900	1700	1900
1050	1850	2050
1200	2100	2300

GRAVEL SIZE	
NOMINAL DIAMETER (mm)	SINGLE SIZE GRAVEL (mm)
100	10
150	10.14
225	10.14.20
300	10.14.20
375	14.20
450	14.20
525	14.20
> 550	14.20.40

CLASS	BEDDING DETAILS	
N		PIPE LAID ON A FLAT LAYER OF GRANULAR MATERIAL WITH COMPACTION FRACTION NOT GREATER THAN 0.3
F		PIPE LAID ON A FLAT LAYER OF GRANULAR MATERIAL WITH COMPACTION FRACTION NOT GREATER THAN 0.2 & AT LEAST 45° OF PIPE PERIMETER SUPPORT
B		PIPE LAID ON A FLAT LAYER OF GRANULAR MATERIAL WITH COMPACTION FRACTION NOT GREATER THAN 0.2
S		PIPE FULLY SURROUNDED BY GRANULAR MATERIAL WITH COMPACTION FRACTION NOT GREATER THAN 0.2 DEPTH TO SOFFIT > 1.2M
S & SLAB		PIPE FULLY SURROUNDED BY GRANULAR MATERIAL WITH COMPACTION FRACTION NOT GREATER THAN 0.2 0.9m < DEPTH TO SOFFIT < 1.2m A393 MESH IN SLAB

KEY

GRANULAR MATERIAL

SELECTED FILL

GRANULAR MATERIAL OR SELECTED FILL CONTAINING NO STONES LARGER THAN 40mm

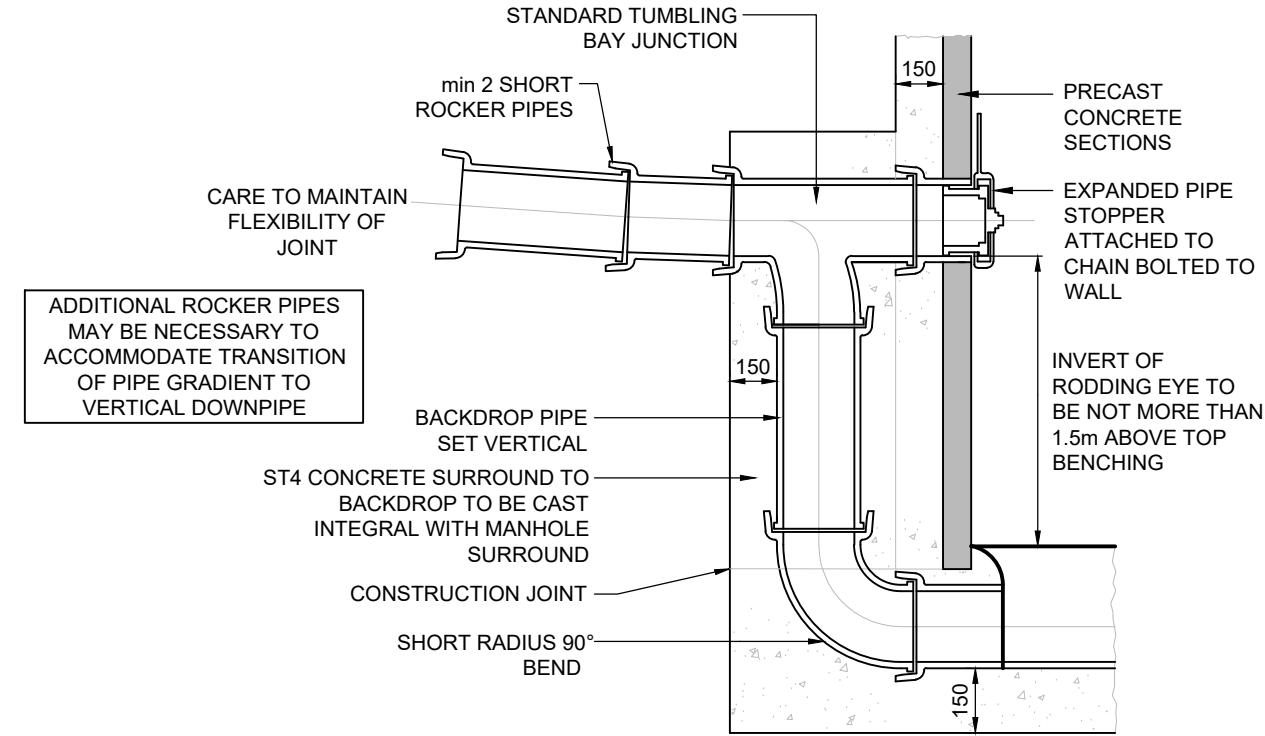
C20P CONCRETE SLAB 1 LAYER A393 FABRIC IN BOTTOM FACE

LENGTH OF ROCKER PIPE AWAY FROM STRUCTURE	
NOMINAL DIA (mm)	EFFECTIVE LENGTH (m)
150 TO 600	0.6
600 TO 750	1.0
> 750	1.25

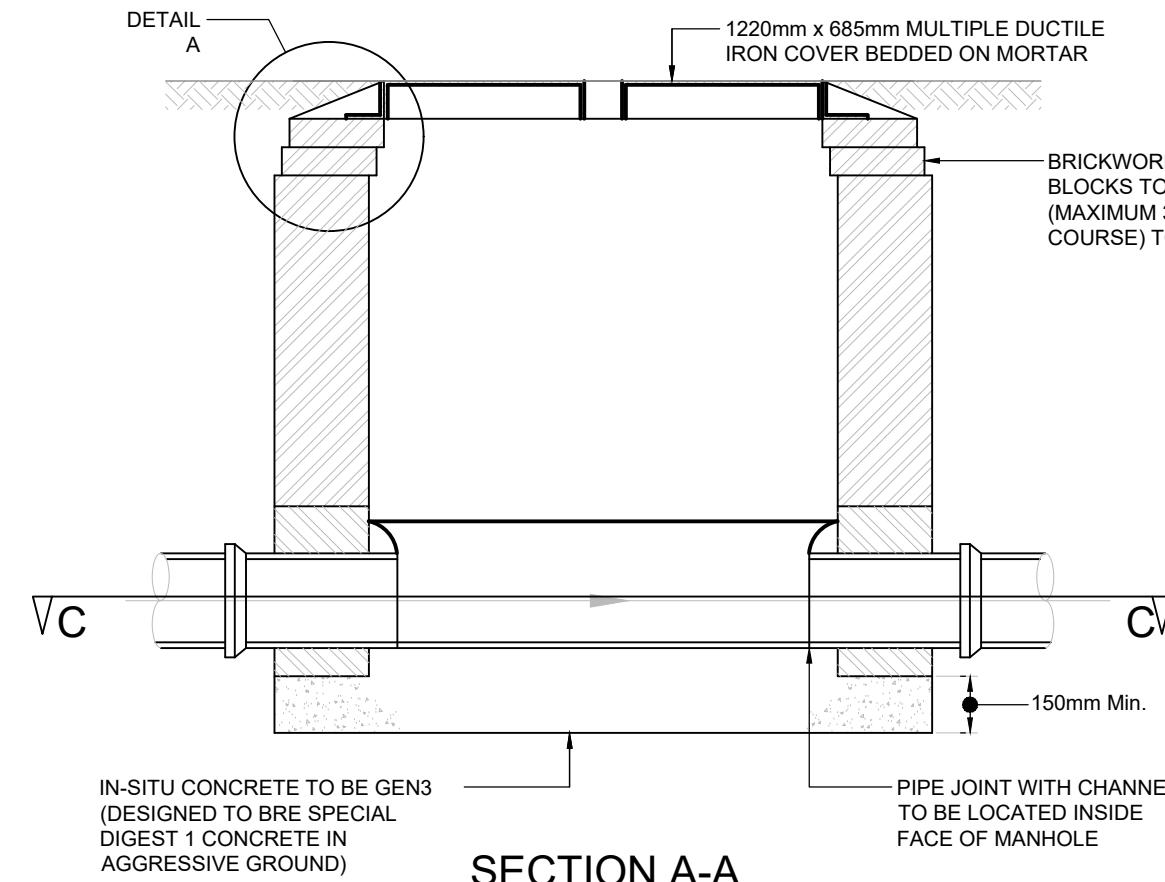
NOMINAL BORE OF PIPE (mm)	THICKNESS OF COMPRESSIBLE JOINT FILLER
< 450	18
450-1200	36
> 1200	54

- NOTES -
- 1) PIPES ENTERING MANHOLES SHALL HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE INSIDE FACE OF THE MANHOLE JOINING WITH A SHORT 'ROCKER PIPE'
- 2) GRANOLITHIC CONCRETE BENCHING TO BE 20MM MINIMUM THICKNESS BROUGHT UP TO A DENSE SMOOTH FACE NEATLY SHAPED & FINISHED TO ALL BRANCH CONNECTIONS
- 3) THE USE OF PRECAST RECTANGULAR/CIRCULAR CONCRETE MANHOLE UNITS WITH 150MM GRADE GEN3 CONCRETE SURROUND (DESIGNED TO BRE SPECIAL DIGEST 1 CONCRETE IN AGGRESSIVE GROUND) IS PERMITTED
- 4) APPROVAL OF THE UNDERTAKER MUST BE GIVEN FOR INSTALLATION OF TYPES C, D, E, AND F MANHOLE
- 5) ALL PRECAST CONCRETE SECTIONS/SLAB & IN-SITU TO BE GEN3 (DESIGNED TO BRE SPECIAL DIGEST 1 CONCRETE IN AGGRESSIVE GROUND)

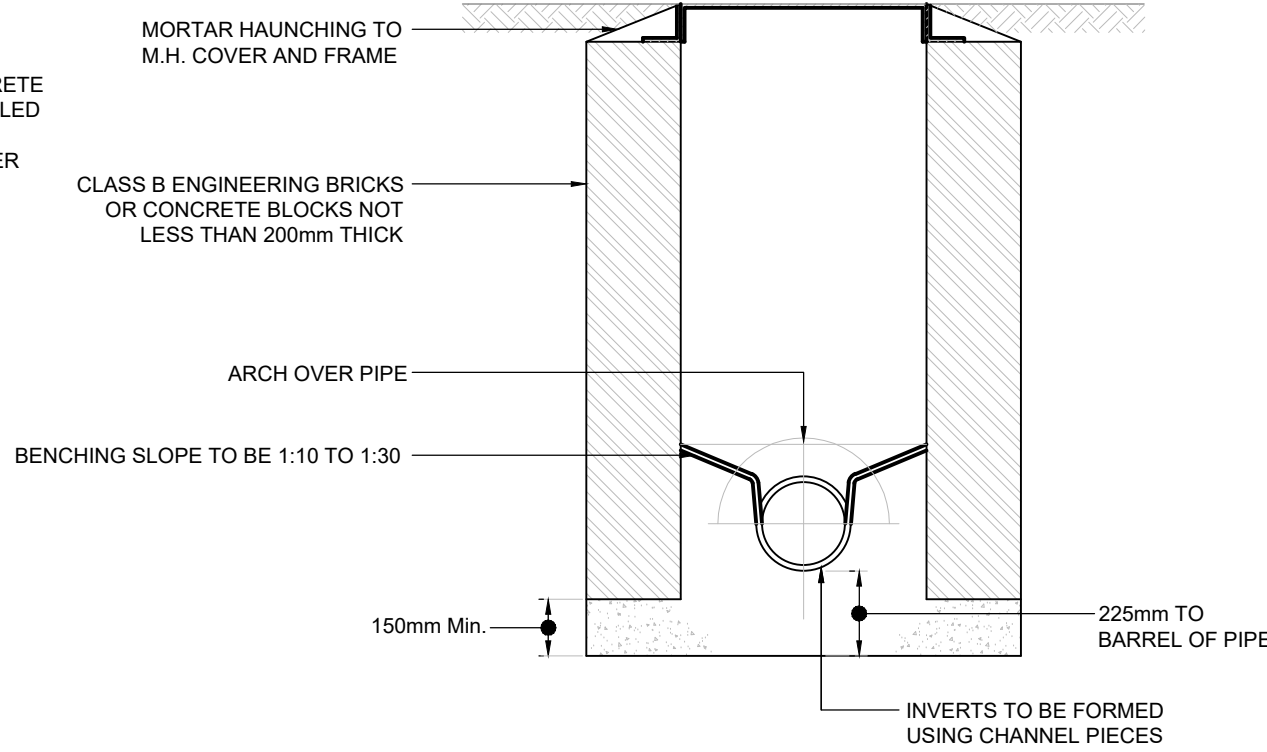
CHAMBER DIAMETERS	
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	CHAMBER SECTION DIAMETER (mm)
<375	1200
375-450	1350
500-700	1500
750-900	1800
>900	Ø + 900



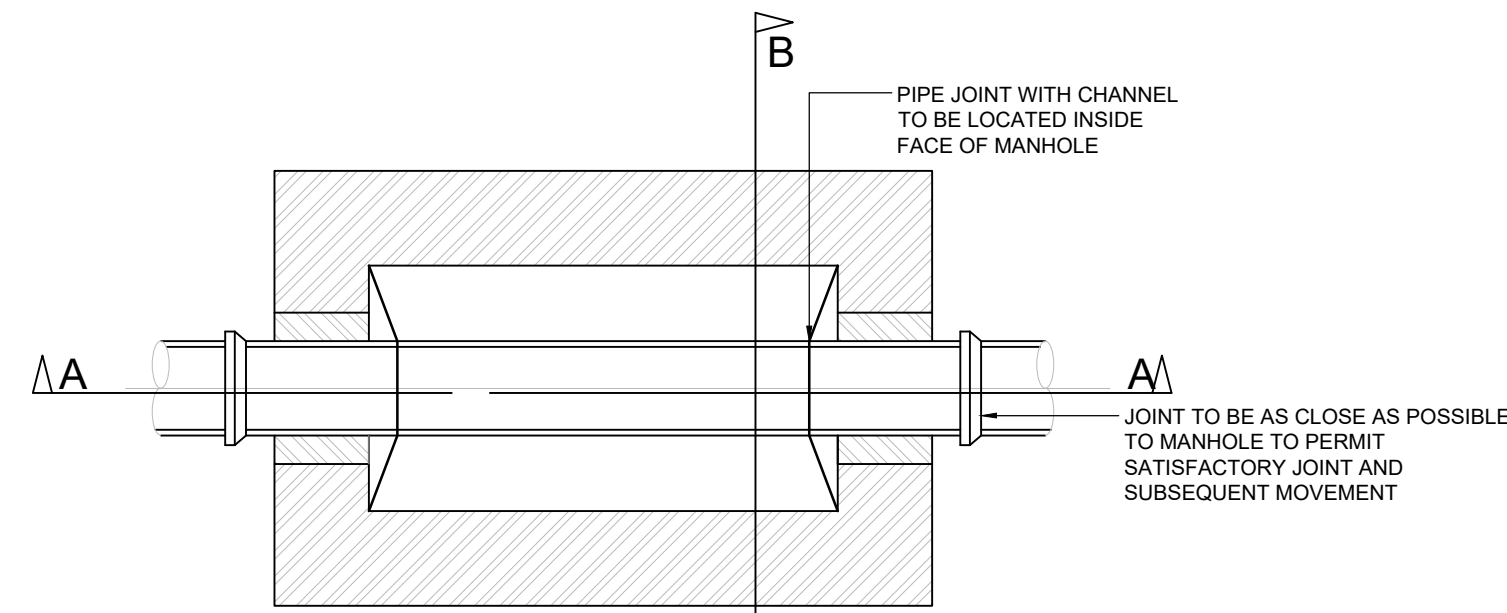
TYPICAL VERTICAL BACKDROP DETAIL (SCALE 1:20)



SECTION A-A (SCALE 1:20)

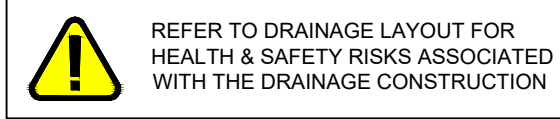


SECTION B-B (SCALE 1:20)

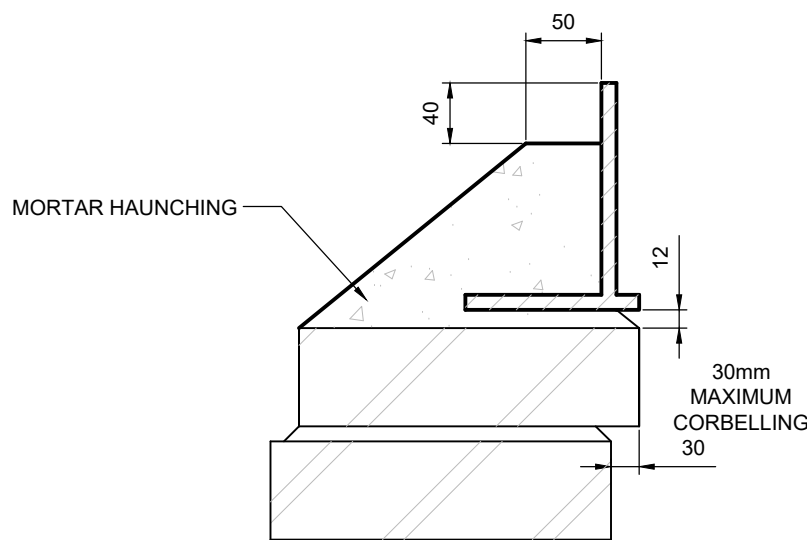


SECTION C-C (SCALE 1:20)

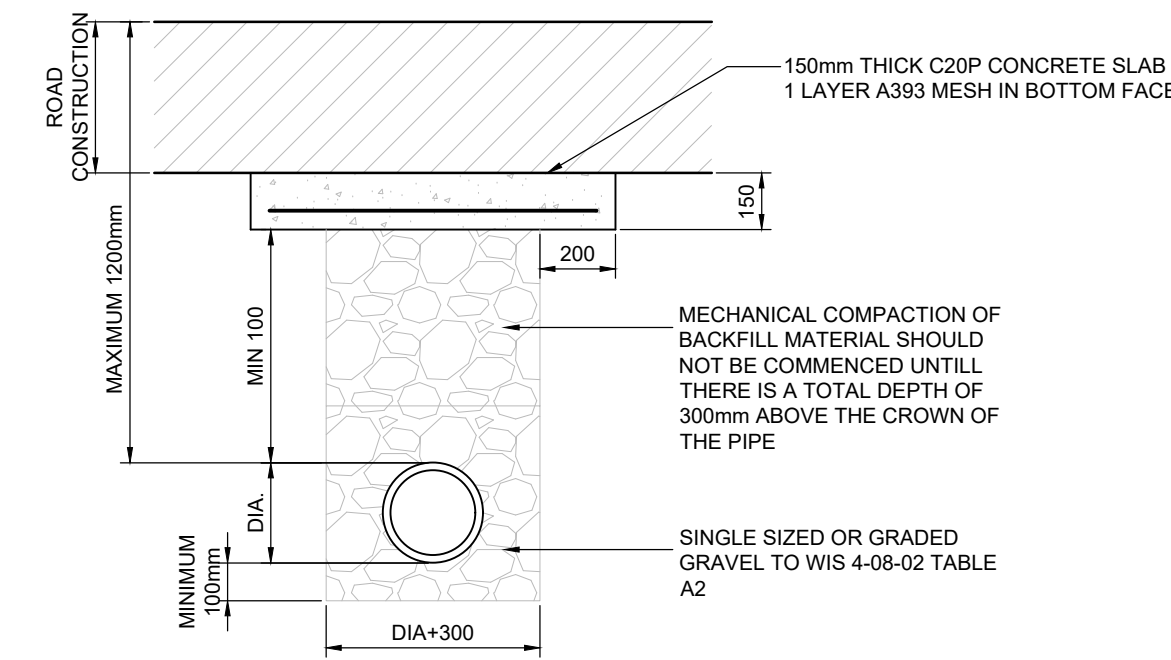
- NOTES -
- 1) INTERNAL DIMENSIONS OF MANHOLE NORMALLY 1240MM X 675MM BUT MANHOLE WIDTH SHOULD BE INCREASED FOR PIPES LARGER THAN 225MM DIAMETER TO GIVE 225MM BENCHING EACH SIDE AND THE BRICKWORK/MASONRY UNITS CORBELLED DOWN TO SUIT COVER



MANHOLE - TYPE C
DEPTH COVER LEVEL TO SOFFIT OF PIPE 1.0m TO 1.5m



DETAIL A (SCALE 1:10)



PLASTIC PIPE BEDDING DETAIL <1200mm COVER (SCALE 1:20)

- NOTES:
1. THESE NOTES ARE INTENDED TO AUGMENT DRAWINGS AND SPECIFICATIONS. WHERE CONFLICT OF REQUIREMENTS EXIST THE ORDER OF PRECEDENCE SHALL BE AS SHOWN IN THE SPECIFICATION. OTHERWISE THE STRICTEST PROVISION SHALL GOVERN.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS.
3. DRAWINGS NOT TO BE SCALED. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER AND FURTHER INSTRUCTIONS OBTAINED BEFORE WORK IS COMMENCED.
4. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE AND ENSURE THAT THE BUILDING AND ITS COMPONENTS ARE SAFE DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS WHICH MAY BE NECESSARY, SUCH MATERIAL REMAINING THE THE PROPERTY OF THE CONTRACTOR ON COMPLETION, AND FOR ENSURING THAT THE WORKS AND ANY ADJACENT PROPERTIES ARE SAFE IN THE TEMPORARY CONDITION.
- FOR NOTATION REFER TO DRAWING No. 52753-AWP-ZZ-XX-D-C-3700

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Project Originator Zone Level Type Role Number					
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