

PRODUCT CLASSIFICATION:
B-FOUNDATION/PASSIVE/BOLLARD
 PERFORMANCE RATING:
IWA14-1:2013 BOLLARD
V/7200[N2A]/48/30:1.2

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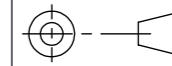
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 ELLAND
 HALIFAX
 WEST YORKS
 HX5 9HT

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NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
 2. DO NOT SCALE DRAWING.
 3. ALL CONCRETE TO BE IN ACCORDANCE WITH BS 8500
 4. MIXES TO BE REINFORCED CONCRETE - C30/C40
 5. ALL MATERIAL & WORKMANSHIP TO BE IN ACCORDANCE WITH RECOMMENDATIONS OF BS-EN 1192 EUROCODE 2
- Foundation sizes given are for customer guidance and suited to sub-soils with good load bearing capabilities. Where adverse site conditions are met professional advice to be sought.



TOLERANCES: LINEAR 0 : +/-1
 0.0 : +/-0.1
 0.00 : +/-0.01
 ANGULAR +/-0.5°

THIRD ANGLE PROJECTION

| Rev | Inits | Revision Notes | ER No. | Date |
|-----|-------|----------------|---------|----------|
| A | MB | FIRST ISSUE | 19-0700 | 26/05/20 |
| B | - | - | - | - |
| C | - | - | - | - |
| D | - | - | - | -/-/- |
| E | - | - | - | - |

PRODUCT TYPE:

BRIDGE PROTECTION

IMPACT RATING:

75/30 30°

SLEEVE DETAIL:

Ø219 STAINLESS STEEL

PRODUCT RANGE:

RHINO GUARD

PROJECT NAME:

ULTRA SHALLOW 50

PROJECT NUMBER

SHALLOW FRAME

SHEET TITLE:

HVM ULTRA SHALLOW 50 - FOOTWAY - Ø219

DRAWING NUMBER:

HVM-72-30-FW-SS

DRAWN BY
MB

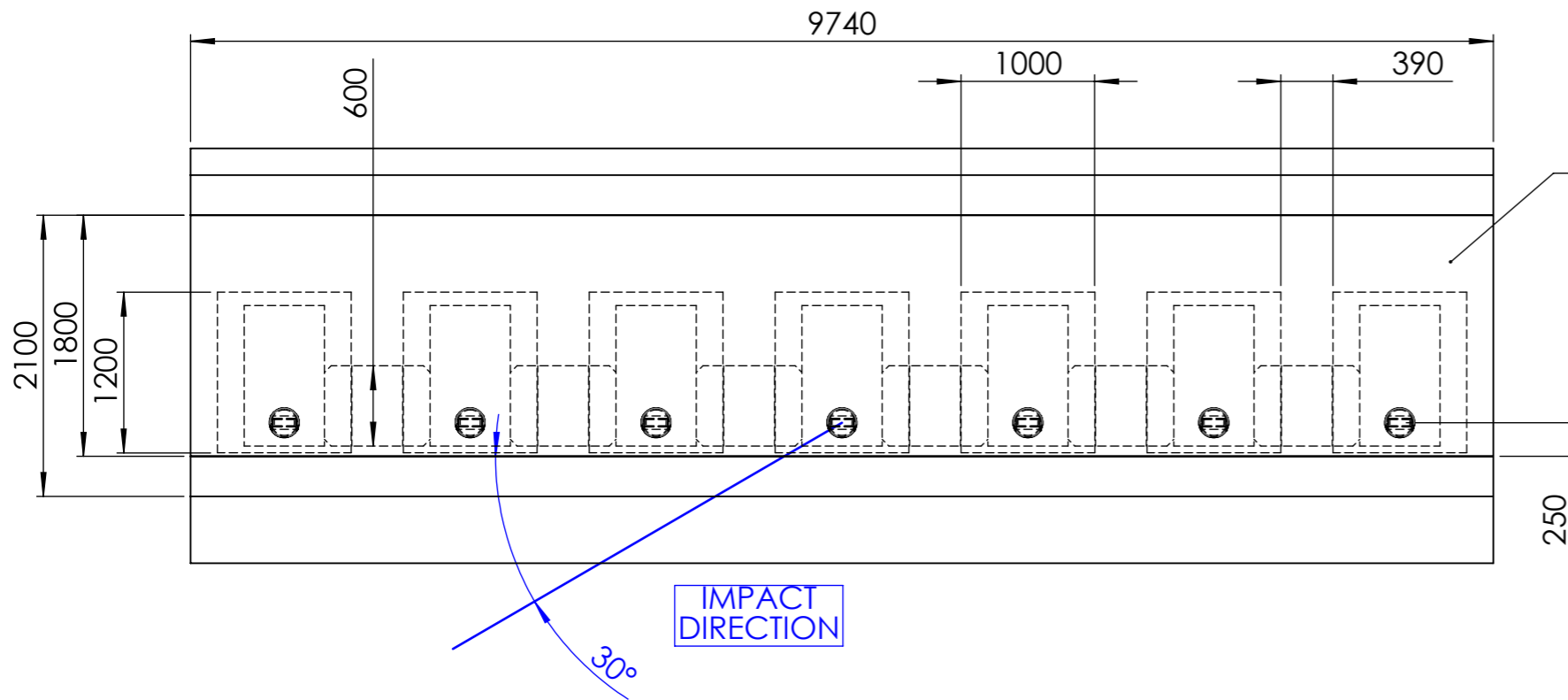
DATE
26/05/20

SCALE
1:50@A3

REVISION

[A]

SHEET 1 of 1

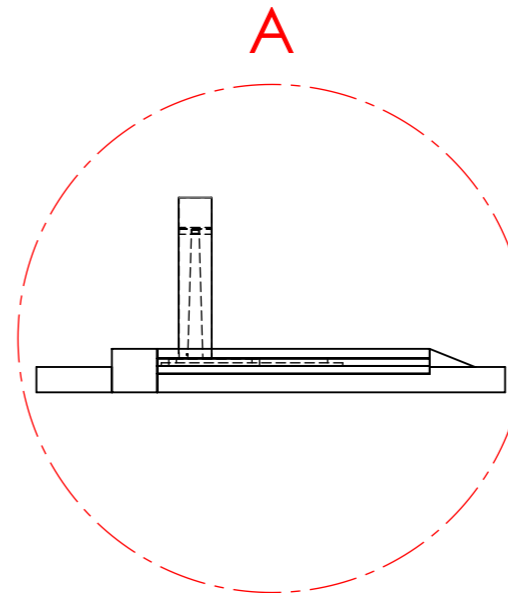
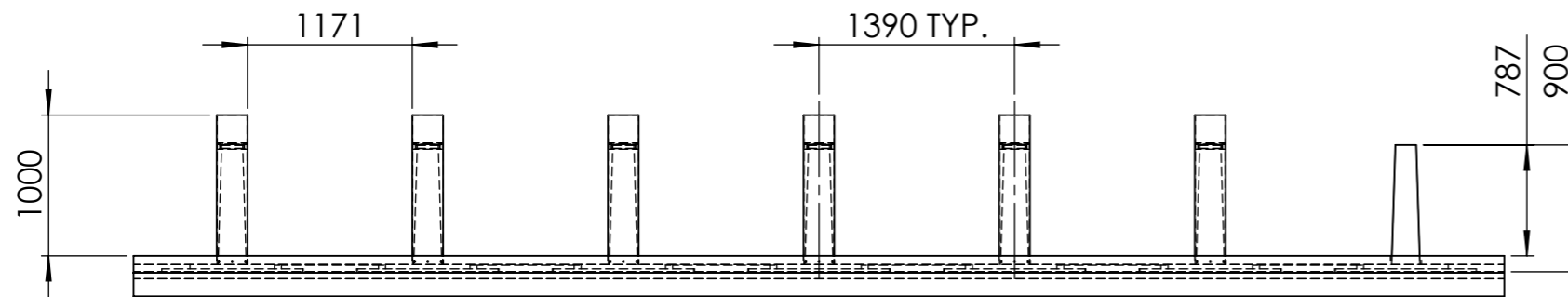


FINISHED GROUND.
 E.G. 900 x 600
 PAVING FLAGS

**NOTE: Ø219 STAINLESS
 STEEL SLEEVE SHOWN.
 OTHER SLEEVES ARE
 AVAILABLE.**

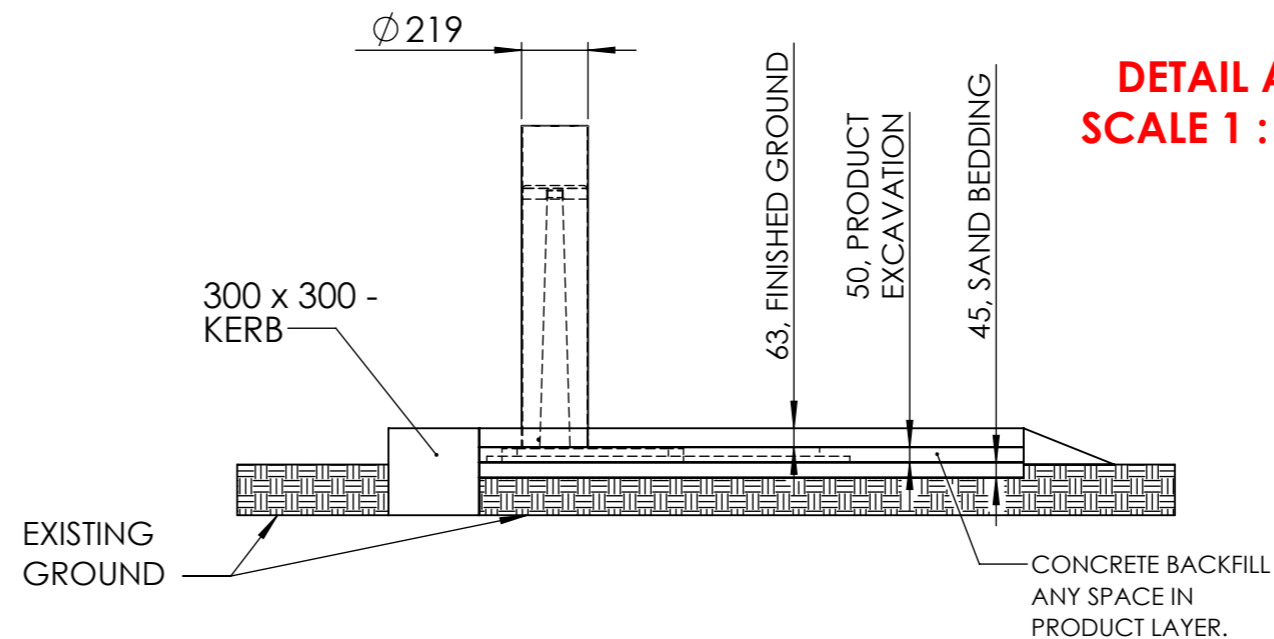
IMPACT
 DIRECTION

30°



A

**DETAIL A
 SCALE 1 : 25**



PRODUCT WEIGHTS:

- HVM FRAME - 390KG
- CONNECTION BRACKET - 95KG
- SLEEVE - 16KG

INSTALLATION INSTRUCTIONS:

EXCAVATE SUITABLE FOUNDATION FOR BOLLARDS
 CONNECT LIFTING EQUIPMENT TO EACH UNIT & LAY
 IN POSITION
 FASTEN UNITS TOGETHER WITH BRACKETS, NUTS
 AND WASHERS.
 CAST CONCRETE AROUND AND ON TOP OF
 PRODUCT TO 50mm LEVEL. C30/C40 SLUMP MINIMUM
 ALLOW CONCRETE TO CURE.
 ADD FERROCAST SPACING RING TO TOP OF
 UPRIGHT.
 SLIDE OVER SLEEVE AND SECURE AT BASE WITH
 SUPPLIED M8 FIXINGS.
 FINISH SURFACE LEVEL IN ACCORDANCE WITH SITE
 REQUIREMENTS, 63mm.
 GROUT AROUND BASE OF SLEEVE TO SECURE.