

 \triangleleft Q S Ó

	ELEMENT TYPE	DETAILS	STRUCTURE
		STANDARD UNITS	5 & 9
		BOX CULVERT WITH INTEGRATED MAMMAL LEDGES	7 & 10
	PRECAST REINFORCED CONCRETE BOX	BOX CULVERT WITH SINGLE MANHOLE ACCESS TO ROOF AND OPENING IN SIDE WALL FOR RC PIPE CULVERT (STR 011)	1
		BOX CULVERT WITH SINGLE MANHOLE ACCESS TO ROOF AND INTEGRATED MAMMAL LEDGES	8
300 E	PRECAST REINFORCED CONCRETE	STANDARD WINGWALLS AND HEADWALLS	1 & 9
	WINGWALLS AND HEADWALL	INTEGRATED MAMMAL LEDGES TO WINGWALL	7, 8 & 10
CTION	PRECAST REINFORCED CONCRETE PIPES	STANDARD UNITS	11 & 12
E No.5	PRECAST REINFORCED CONCRETE INLET/OUTLET UNITS	STANDARD UNITS	5, 11, & 12

SCALE 1:25



DRAWING NUMBERS
VSP-SMN-ST001-DR-CB-0001 TO 0003
VSP-SMN-ST005-DR-CB-0001 TO 0003
VSP-SMN-ST007-DR-CB-0001 TO 0003
VSP-SMN-ST008-DR-CB-0001 TO 0003
VSP-SMN-ST009-DR-CB-0001 TO 0003
VSP-SMN-ST010-DR-CB-0001 TO 0005
VSP-SMN-ST011-DR-CB-0001 TO 0003
VSP-SMN-ST012-DR-CB-0001 TO 0003

NOTES **FNERAI**

ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE

- ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE. DO NOT SCALE FROM THIS DRAWING.
- THE DRAWING TO BE READ IN CONJUNCTION WITH THE

SPECIFICATION FOR HIGHWAY WORKS, CONTRACT SPECIFIC APPENDICES, DRAWING NYKGDD-WSP-SMN-ALL-DR-CB-0002 AND WITH THE SPECIFIC DRAWINGS FOR EACH STRUCTURE - SEE TABLE 1.

THE CONTRACTOR SHALL MEASURE AND CONFIRM ALL DIMENSIONS/LEVELS THAT HAVE A DIRECT IMPACT ON THE WORKS PRIOR TO EXECUTION. IN CASE OF DOUBTS, OMISSIONS OR ERRORS, CONTRACTOR TO SEEK CLARIFICATION FROM THE NEC PROJECT MANAGER.

FOR THE AFFECTED AREAS PRIOR TO WORKS THE CONTRACTOR SHALL OBTAIN UP-TO-DATE UTILITY PLANS AND CARRY OUT A SURVEYS TO POSITIVELY IDENTIFY AND MARK-UP ANY UTILITY APPARATUS. REFER TO APPENDIX 1/16 FOR FURTHER INFORMATION.

CONTRACTOR DESIGNED ELEMENTS: THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING THE PRECAST REINFORCED CONCRETE ELEMENTS LISTED IN TABLE 2 IN ACCORDANCE WITH NYCC AIP DOCUMENTATION. SEE APPENDIX

- 1/10 FOR FURTHER DETAILS. UNLESS NOTED OTHERWISE EXTERNAL ARRISES AND INTERNAL CORNERS OF REINFORCED CONCRETE ELEMENTS TO HAVE MINIMUM 25 X 25 CHAMFER.
- **EOTECHNICAL**
- FORMATION INSPECTIONS SHALL BE UNDERTAKEN BY THE EMPLOYER'S SITE REPRESENTATIVE WHO SHALL BE A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER. ANY SOFT SPOTS SHALL BE EXCAVATED AND REPLACED IN ACCORDANCE WITH THE RELEVANT STANDARD EARTHWORKS DETAILS AND IN ACCORDANCE WITH THE SERIES 600 SPECIFICATION. THE NEC PROJECT MANAGER SHALL BE INFORMED IMMEDIATELY IF FORMATION MATERIAL DIFFERS FROM THAT ASSUMED WITHIN THE DESIGN.
-). SEE STRUCTURE SPECIFIC DRAWINGS FOR CULVERT FOUNDATION AND BEDDING REQUIREMENTS.
- 1. TYPICALLY EMBANKMENT SLOPES ARE TO BE OF A MAXIMUM OF 1 IN 3. WHERE THEY INTERFACE WITH INLETS AND OUTLETS THEY MAY NEED TO BE LOCALLY STEEPENED WITH AGREEMENT FROM NEC PROJECT MANAGER.
- 12. PRECAST BOX CULVERT TO BE BACKFILLED WITH 6N OR 6P STRUCTURAL FILL IN ACCORDANCE WITH SERIES 600 OF THE SPECIFICATION FOR HIGHWAY WORKS OVER EXTENTS SHOWN ON STRUCTURE SPECIFIC DRAWINGS. WATERPROOFING AND DRAINAGE:
- 13. BURIED CONCRETE ELEMENTS SHALL BE PAINTED WITH 2 COATS OF CUT BACK BITUMEN IN ACCORDANCE WITH SPECIFICATION CLAUSE 2004 & 2006, WITH THE EXCEPTION OF AREAS TO RECEIVE A WATERPROOFING MEMBRANE.
- SURFACES TO RECEIVE WATERPROOFING MEMBRANE TO HAVE U4 FINISH IN ACCORDANCE WITH SERIES 1700 OF THE SPECIFICATION FOR HIGHWAY WORKS. WATERPROOFING MEMBRANE TO BE IN ACCORDANCE WITH APPENDIX 20/1 OF THE SPECIFICATION AND DETAILS SHOWN ON DRAWING NYKGDD-WSP-SMN-ALL-DR-CB-0002.
- 5. WEEPHOLES TO BE PROVIDED TO CULVERT WINGWALLS IN ACCORDANCE WITH THE DETAILS SHOWN ON DRAWING NYKGDD-WSP-SMN-ALL-DR-CB-0002. MANHOLE ACCESS:
- 16. MANHOLE ACCESS TO BE PROVIDED AS DETAILED ON STRUCTURE SPECIFIC DRAWINGS.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

N ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS NSTRUCTION 15 - CONFINED SPACES (TANKS, TUNNELS, PITS, CULVERTS)

60 - FLOOD RISK (PLUVIAL) 5 - UNDERGROUND TELECOM

AFETY, HEALTH AND ENVIRONMENTAL SYMBOL LEGEND INDICATES A RESIDUAL RISK AS A WARNING

21/07/2023	ISSUED FOR CONSTRUCTION	SH	DM	DM
Date	Description	Ву	Chk'd	App'd
	21/07/2023 Date	Image: state	Image: marked state	Image: selection of the



Three White Rose Office Park, Millshaw Park Lane, Leeds, LS11 0DL, UK T+ 44 (0) 113 395 6200, F+ 44 (0) 113 395 6201 wsp.com



A59 KEX GILL DIVERSION

awing Title

TYPICAL CULVERT DETAILS SHEET 1 OF 2

Scale	Drawn	Checked	Approved	Authorised
AS SHOWN	LS	IM	HM	HM
Driginal Size	Date	Date	Date	Date
A1	31/01/20	31/10/20	31/10/20	31/10/20
Drawing Status				Suitability
FOR	CONSTRU	ICTION IS	SUE	A1
FOR Drawing Number Project				A1 Project Ref. No.
FOR Drawing Number Project NYKGDD	CONSTRU Originator WSP	ICTION ISS	SUE ^{Ime} 1N	A1 Project Ref. No. Revision