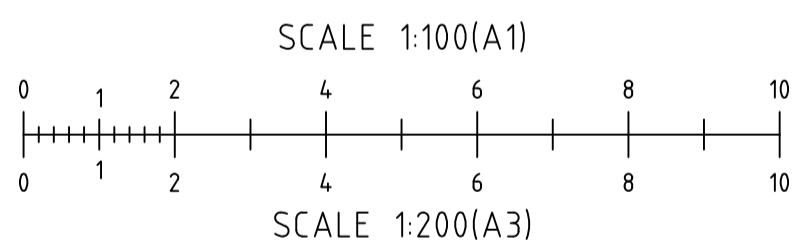


DASHED LINE DENOTES THE APPLICABLE STORM WATER CATCHMENT FOR PROPOSED EXTENSION.
 TOTAL AREA = 867SQM
 • EXISTING ROOFED AREA =317SQM
 • EXISTING IMPERVIOUS AREA =485 SQM
 • EXISTING PERVIOUS AREA =65 SQM



EXISTING SITE PLAN
 REDUCTION RATIO 1:100 @ A1
 1:200 @ A3

LEGEND	
	EXISTING SUBJECT CADASTRAL BOUNDARIES
	EXISTING UNDERGROUND SEWER LINE
	EXISTING UNDERGROUND STORMWATER LINE
	EXISTING UNDERGROUND WATER LINE



SUBMISSION FOR DA



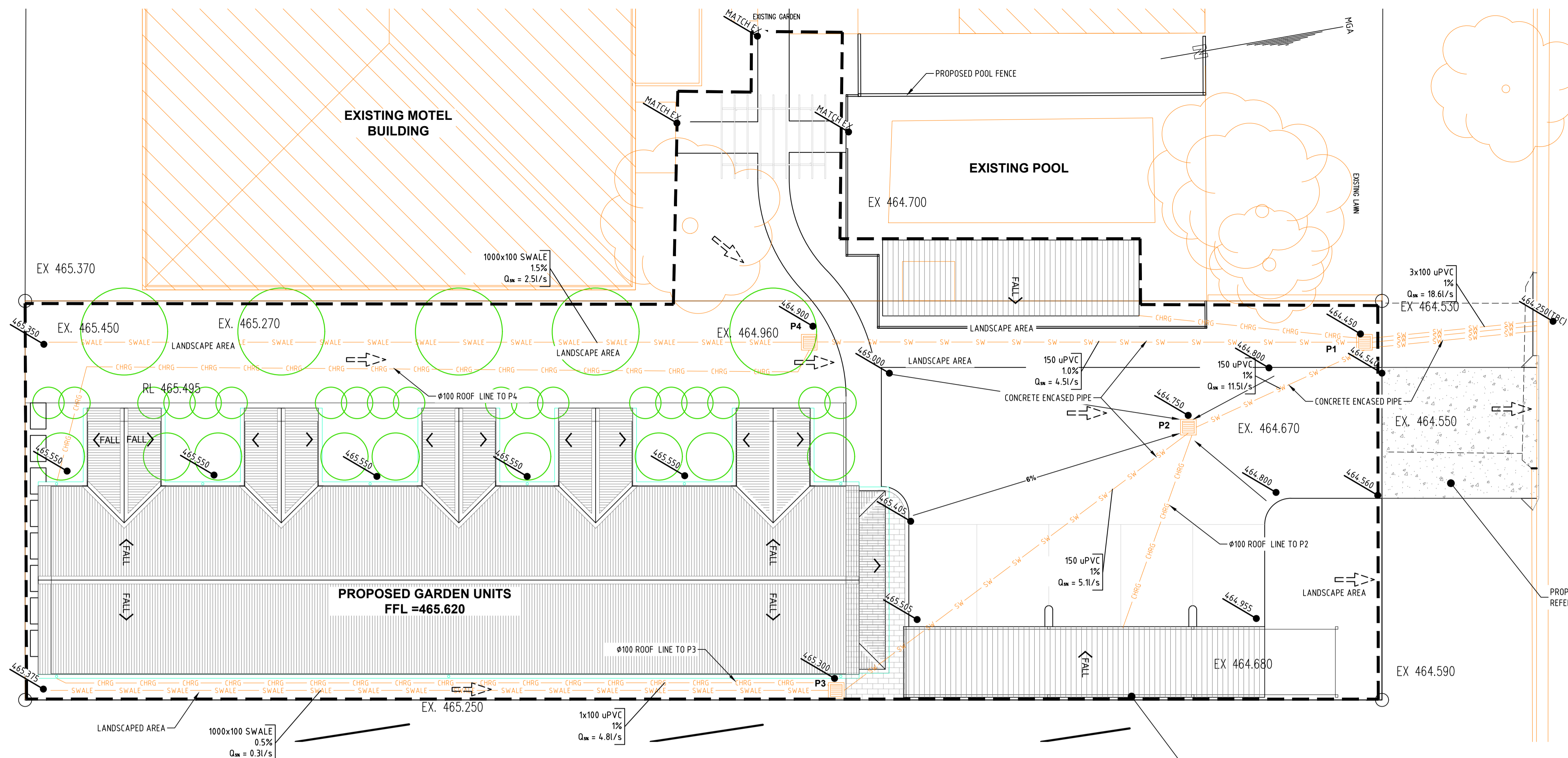
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Client: HORATIO MOTOR INN
 Project: EXTENSION TO HORATIO MOTOR INN
 11 HORATIO STREET MUDGEE NSW 2850
 Drawing Title: EXISTING SITE PLAN

Rev	Date	Amendment
A	17.06.2022	ISSUED FOR APPROVAL

Design	ST	Certification	
Drawn	ST		
Check	LM	Drawing Number	
Original Sheet Size = A1		33583-C11	Revision A



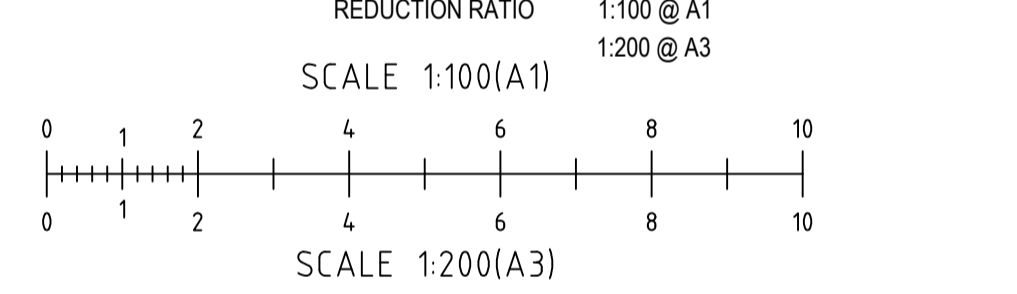
LEGEND

- EXISTING SUBJECT CADASTRAL BOUNDARIES
- Ex. S — Ex. S — EXISTING UNDERGROUND SEWER LINE
- Ex. SW — Ex. SW — EXISTING UNDERGROUND STORMWATER LINE
- Ex. W — Ex. W — EXISTING UNDERGROUND WATER LINE

LEGEND (proposed)

- SWALE — SWALE — PROPOSED SWALE DRAIN, SIZE AS SPECIFIED
- SW — SW — PROPOSED UNDERGROUND STORMWATER PIPE
- CHR — CHR — PROPOSED CHARGED PIPE TO ROOF DRAINAGE
- P1 DENOTES PROPOSED GRATED PIT, REFER DETAILS
- FALL > ROOF - DIRECTION OF FALL
- ⇨ OVERLAND FLOW PATH
- [Hatched Box] EXTENT OF PROPOSED ROOF
- [Solid Grey Box] EXTENT OF PROPOSED HARDSTAND/PATH
- [Dotted Box] EXTENT OF PROPOSED CONCRETE CROSSOVER
- 150 uPVC 1.0% GRADIENT 5% AEP FLOW
- 150 uPVC 1.0% GRADIENT 5% AEP FLOW
- PROPOSED PIPE SIZE & MATERIAL GRADIENT 5% AEP FLOW
- PROPOSED GROUND LEVEL

CONCEPT STORMWATER MANAGEMENT PLAN



DASHED LINE DENOTES THE APPLICABLE STORM WATER CATCHMENT FOR PROPOSED EXTENSION.

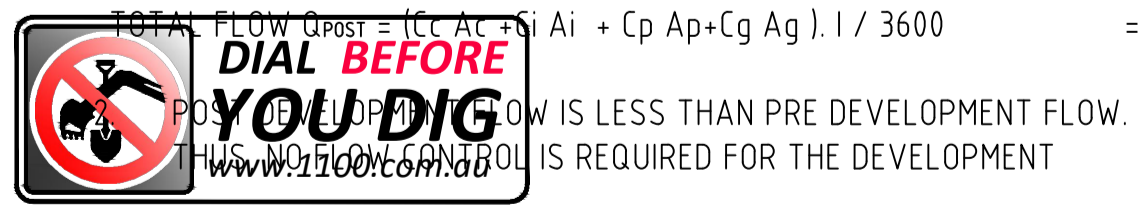
TOTAL AREA = 867SQM

- PROPOSED ROOFED AREA = 338SQM
- PROPOSED IMPERVIOUS AREA = 210 SQM
- PROPOSED PERVIOUS AREA = 319 SQM

HYDRAULIC ANALYSIS & CALCULATIONS

1. SITE ANALYSIS:
- DESIGN CALCULATIONS AS PER AS3500.3-2021
- A) PRE-DEVELOPMENT FLOW:
- TOTAL APPLICABLE CATCHMENT AREA (A) = 867 sq.m
 - RAINFALL INTENSITY (I) = 14.7 mm/hr (5min -5%AEP)
 - Cc = RUNOFF COEFFICIENT FOR ROOF AREA = 1.0
 - Ac = TOTAL ROOF AREA = 317sq.m
 - Ci = RUNOFF COEFFICIENT FOR UNROOFED IMPERVIOUS AREA = 0.9
 - Ai = TOTAL UNROOFED IMPERVIOUS AREA = 485 sq.m
 - Cp = RUNOFF COEFFICIENT FOR PERVIOUS AREA = 0.3
 - Ag = TOTAL PERVIOUS GRASS AREA = 65sq.m
 - TOTAL FLOW Q_{PRE} = (Cc Ac + Ci Ai + Cp Ap) . I / 3600 = 31.6 l/s
- B) POST-DEVELOPED FLOW:
- TOTAL APPLICABLE CATCHMENT AREA (A) = 867 sq.m
 - RAINFALL INTENSITY (I) = 14.7mm/hr (5min -5%AEP)
 - Cc = RUNOFF COEFFICIENT FOR ROOF AREA = 1.0
 - Ac = TOTAL ROOF AREA = 338 sq.m
 - Ci = RUNOFF COEFFICIENT FOR UNROOFED IMPERVIOUS AREA = 0.9
 - Ai = TOTAL UNROOFED IMPERVIOUS AREA = 210sq.m
 - Cp = RUNOFF COEFFICIENT FOR PERVIOUS AREA = 0.3
 - Ag = TOTAL PERVIOUS GRASS AREA = 319 sq.m
 - TOTAL FLOW Q_{POST} = (Cc Ac + Ci Ai + Cp Ap + Cg Ag) . I / 3600 = 25.4 l/s

STORMWATER PIT SCHEDULE						
PIT No.	TOP R.L.	DEPTH (mm)	IL INLET	IL OUTLET	LxB	LID TYPE
P1	264.450	300	464.300	464.300	600x600	HD GRATED
P2	464.750	350	464.400	464.400	600x600	HD GRATED= SPELL STORMSACK GPT
P3	465.300	700	464.600	464.600	450x450	HD GRATED
P4	464.900	400	464.500	464.500	600x600	HD GRATED



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Client: HORATIO MOTOR INN
 Project: EXTENSION TO HORATIO MOTOR INN
 11 HORATIO STREET MUDGEE NSW 2850
 Drawing Title: CONCEPT STORMWATER MANAGEMENT PLAN

Rev Date Amendment
 A 17.06.2022 ISSUED FOR APPROVAL
 B 06.07.2022 FFL UPDATED AS PER CLIENT

Design ST Certification
 Drawn ST
 Check LM Drawing Number
 Original Sheet Size = A1 34583-C12
 Revision B

SITWORKS NOTES

1. ORIGIN OF LEVELS -- AHD
2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.
3. ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS, THE SPECIFICATIONS AND THE DIRECTIONS OF THE SUPERINTENDENT.
4. EXISTING SERVICES HAVE BEEN OBTAINED FROM SURFACE INSPECTION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
5. WHERE NEW WORKS ABOUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
6. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A QUALIFIED SURVEYOR.
7. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER TELECOM OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
8. ON COMPLETION OF CONSTRUCTION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS.
9. MAKE SMOOTH TRANSITION TO EXISTING AREAS.
10. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DIVERSION DRAINS AND MOUNDS TO ENSURE THAT AT ALL TIMES EXPOSED SURFACES ARE FREE DRAINING AND WHERE NECESSARY EXCAVATE SUMPS AND PROVIDE PUMPING EQUIPMENT TO DRAIN EXPOSED AREAS. ALL WORK TO BE UNDERTAKEN WITH ADHERENCE TO THE REQUIREMENTS OF THE SOIL AND WATER MANAGEMENT PLAN.
11. THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS.

SURVEY NOTES

1. CONTOURS SHOWN DEPICT THE TOPOGRAPHY. EXCEPT AT SPOT LEVELS SHOWN THEY DO NOT REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT.
2. SERVICES SHOWN HEREON HAVE BEEN DETERMINED FROM VISUAL EVIDENCE AND ARE INDICATIVE ONLY. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE THE RELEVANT AUTHORITY SHOULD BE CONTACTED TO ESTABLISH DETAILED LOCATION AND DEPTH.

PIPE TRENCH - FILL NOTES:

1. BEDDING SAND

BEDDING SAND SHALL BE GRANULAR MATERIAL HAVING A LOW PERMEABILITY AND HIGH STABILITY WHEN SATURATED, CONFORMING TO THE GRADING LIMITS FOR BEDDING SAND AS INDICATED IN THE CONTRACT DOCUMENTS. BEDDING SAND SHALL BE COMPACTED TO A DENSITY INDEX OF 95% AS DETERMINED IN ACCORDANCE WITH AS1289.

2. APPROVED IMPORTED GRANULAR FILL

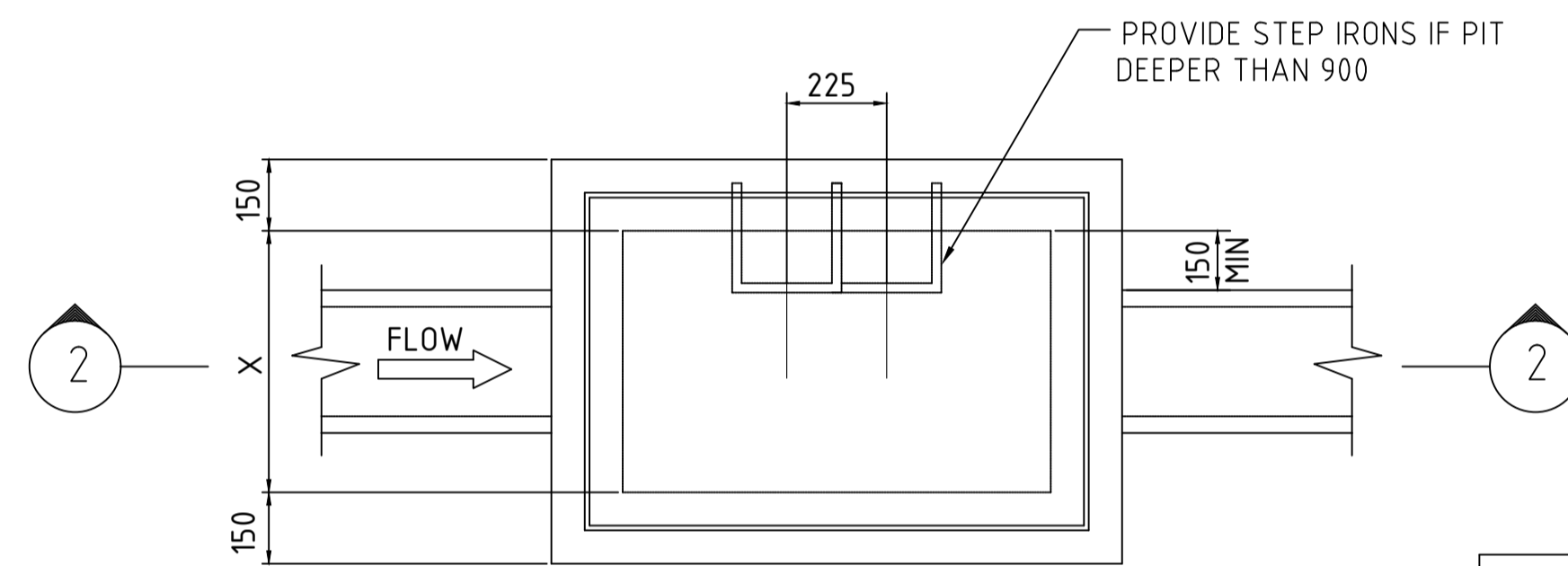
ONLY IMPORTED GRANULAR FILL MATERIAL APPROVED BY THE SUPERINTENDENT SHALL BE USED. THIS FILL MATERIAL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 300mm THICK TO A DRY DENSITY OF 100% OF THE STANDARD MAXIMUM DRY DENSITY OF THE MATERIAL AND WITH A MOISTURE CONTENT NO MORE THAN 1% ABOVE OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH AS1289.

3. ORDINARY EXCAVATED FILL MATERIAL

ORDINARY EXCAVATED FILL MATERIAL IS EXCAVATED TRENCH MATERIAL THAT IS FREE OF VEGETABLE MATTER, HUMUS, LARGE CLAY LUMPS AND ROCK BOULDERS. THIS FILL MATERIAL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 300mm THICK, TO A DENSITY OF 95% OF THE STANDARD MAXIMUM DRY DENSITY OF THE MATERIAL WITH A MOISTURE CONTENT OF NOT MORE THAN 1% ABOVE THE OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH AS1289.

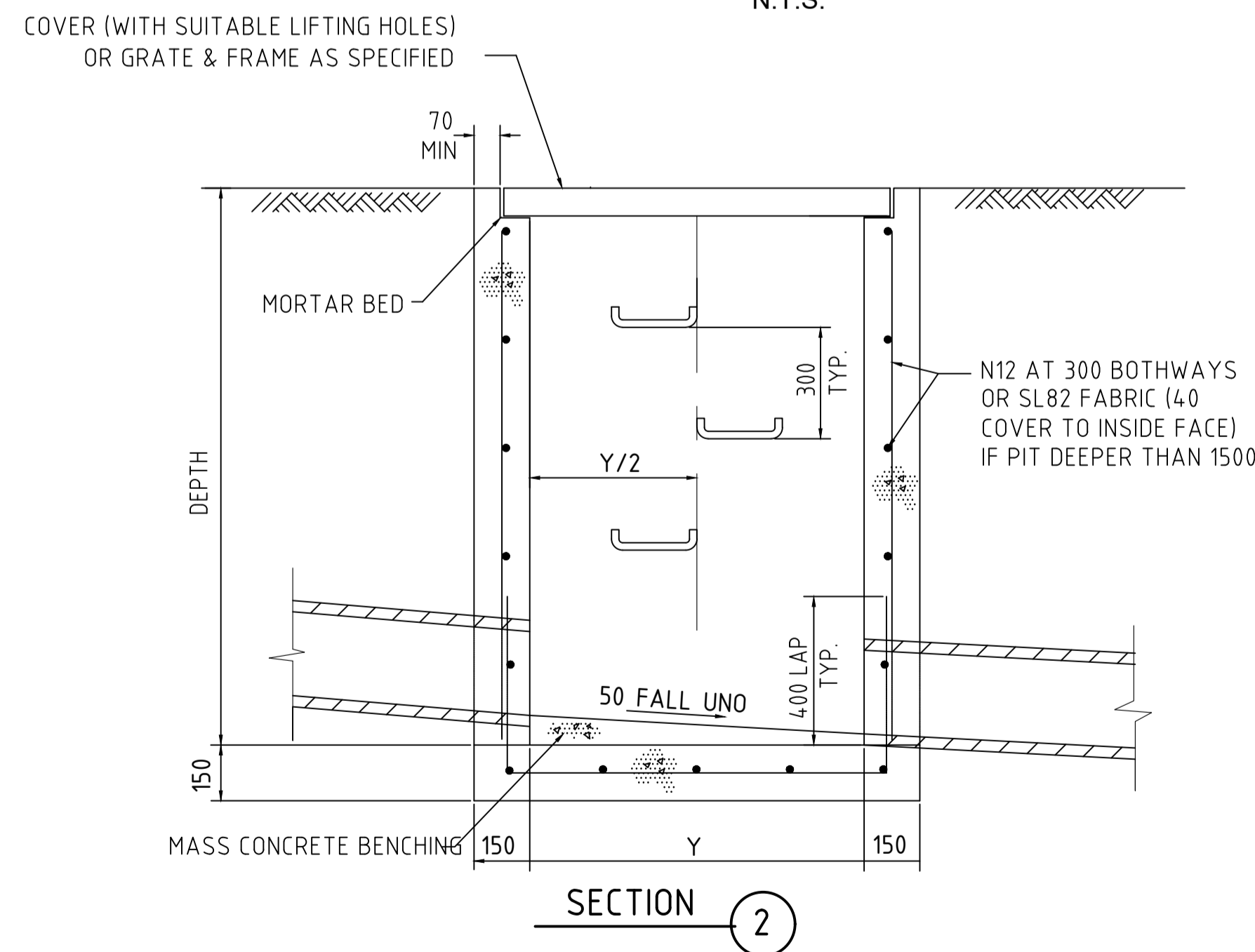
STORMWATER NOTES

1. ALL DOWNPIPE LINES SHALL BE SEWER GRADE uPVC WITH SOLVENT WELD JOINTS (U.N.O)
2. EQUIVALENT STRENGTH VCP OR FCP PIPES MAY BE USED.
3. MINIMUM GRADE TO STORMWATER LINES TO BE 0.5% MINIMUM (U.N.O)
4. CONTRACTORS TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
5. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
6. APPROVED PRECAST PITS MAY BE USED.
7. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN. 50mm CONCRETE BED (75mm THICK BED OF 12mm BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR THE ROCK. IN OTHER THAN ROCK, PIPES SHALL BE LAID ON A 75mm THICK SAND BED. IN ALL CASES, BACKFILL THE TRENCH WITH THE SAND TO 200mm ABOVE THE PIPE. WHERE THE PIPE IS UNDER PAVEMENTS, BACKFILL REMAINDER OF TRENCH WITH SAND OR APPROVED GRANULAR BACKFILL COMPACTED IN 150mm LAYERS TO 98% MAX. DRY DENSITY.
8. WHERE STORMWATER LINES PASS UNDER FLOOR SLABS, SEWER GRADE RUBBER RING JOINTS ARE TO BE USED.
9. ALL PIPES IN THE ROADWAY AND FOOTPATH AREAS, WHERE THE DEPTH OF PIPE IS LESS THAN 500mm FROM THE FINISHED SURFACE LEVEL ARE TO BE CONCRETE ENCASED.

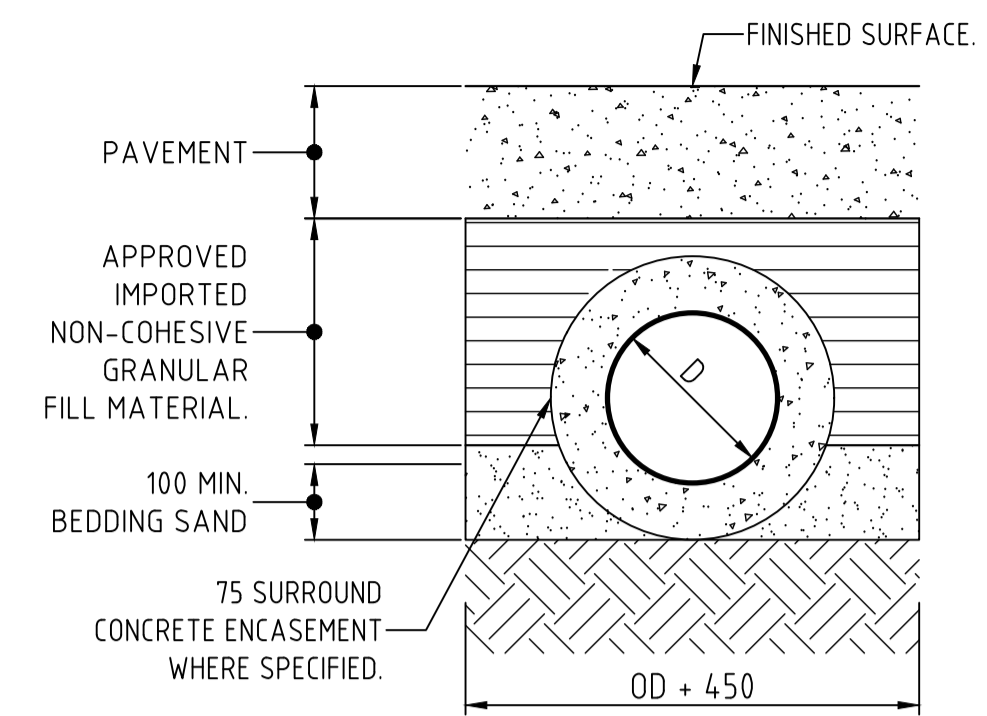


**PLAN
GRADED INLET PIT
N.T.S.**

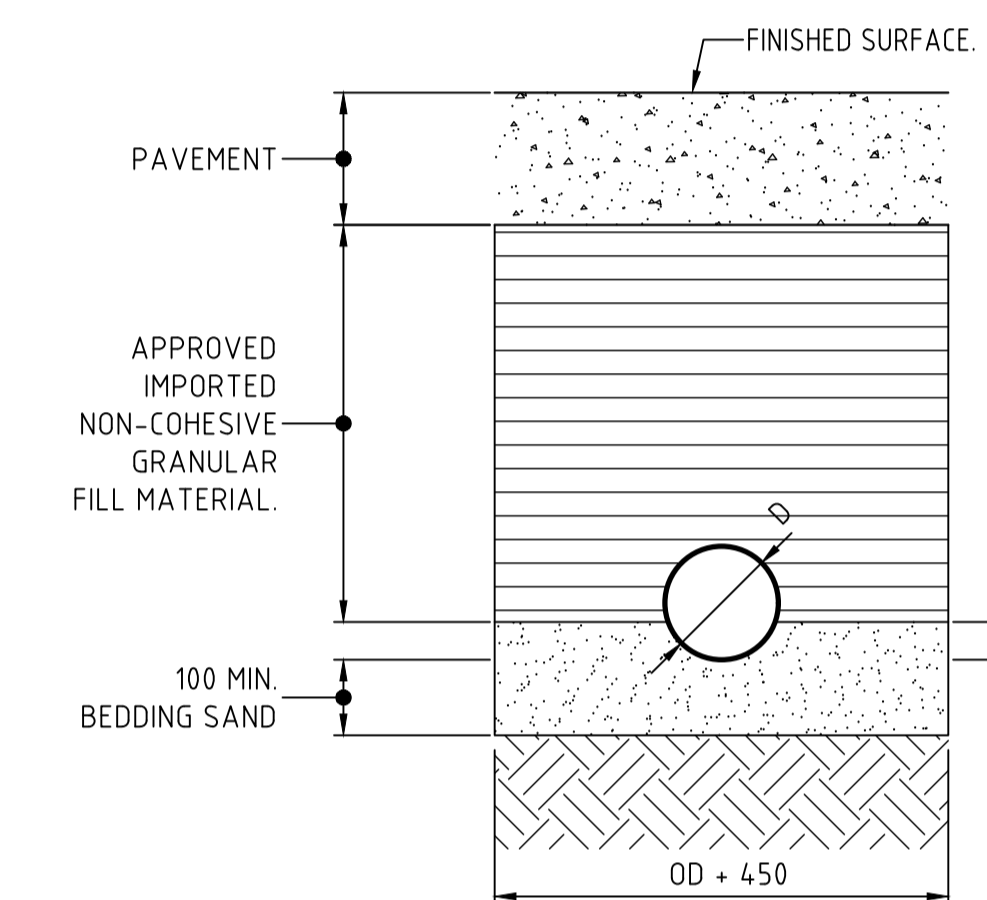
PIT DIMENSIONS		
DEPTH	X	Y
D=600	450	450
D=1000	600	600
D=1500	600	900



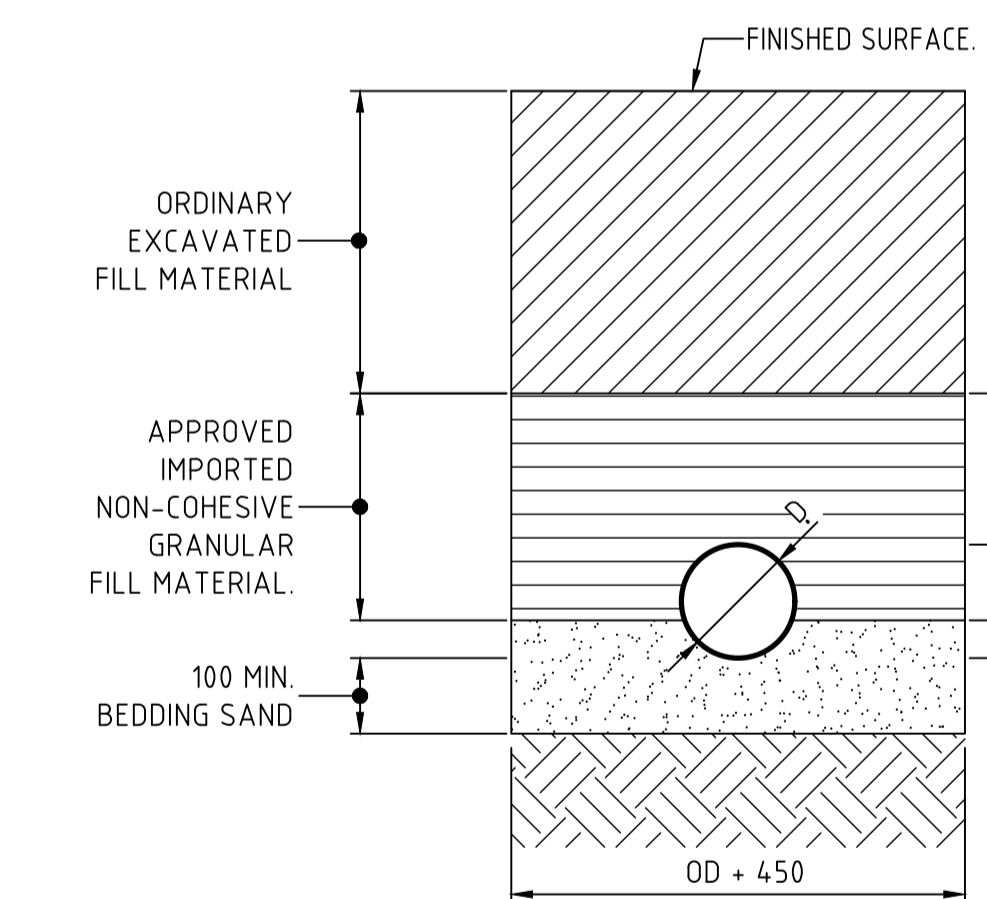
**SECTION
2**



**TYPICAL PIPE CONCRETE ENCASEMENT
SCALE = 1:10**



**TYPICAL SECTION TRENCH IN ROADWAY
SCALE 1:10
NOTE: PIPE COLLAR IS NOT TO REST ON ORIGINAL MATERIAL**



**TYPICAL SECTION EARTH FOUNDATION TRENCH
SCALE 1:10
NOTE: PIPE COLLAR IS NOT TO REST ON ORIGINAL MATERIAL**

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