Lindfield Learning Village
Phase 2 & 3
100 Eton Road
Lindfield NSW 2070

Stormwater Operation & Maintenance Plan

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D	29/01/2019	Area of Responsibility added to drawings Pit and Pipe Schedule added	Stefan Bahrow	D DeGioia	L DeGioia
E	16/07/2019	Updated Area of Responsibility and Bus Roadway added	Stefan Bahrow	D DeGioia	L DeGioia

EXECUTIVE SUMMARY

EWFW is pleased to provide you with this Operators Management manual, for the Department of Education, Lindfield facility for the drainage infrastructure, Rainwater tank, and OSD Basin / Rain Garden.

CONTENTS

1. INTRODUCTION

1.1. PURPOSE

This **Stormwater Operation & Maintenance Plan** has been prepared by **EWFW** on behalf of the NSW Department of Education and School Infrastructure NSW (the Applicant). It accompanies a Response to Submissions Report in support of State Significant Development Application (SSD 16_8114) for Lindfield Learning Village (the site).

On 24 October 2018 the Minister for Planning granted partial development consent to SSD 8114 for Phase 1 construction and operation of a new school for 350 students. The remainder of SSD 8114 (as originally proposed) has not yet been granted consent and has been subject to further investigation, assessment and engagement with the relevant agencies (DPE, RFS, OEH, RMS, TfNSW) and Council.

The Response to Submissions and supporting documents seek approval for the remainder of SSD 8114, being:

Phase 2(a) of construction:

- Minor internal works within the approved Phase 1 area to accommodate an additional 35 students.
- The additional 35 students (a total of 385 enrolled students) is needed for Day 1 Term 1
- 2020, prior to Phase 2(b) being completed.
- Phase 2(a) will occur immediately on approval to allow the additional students for Day 1 Term 1 2020.

Phase 2(b) of construction:

- Works to accommodate 1,050 students (including the approved 350).
- Repurposing of the Phase 1 area.
- A loop road around the southern portion of the site for emergency vehicles, buses and drop off and pick up vehicles.

Phase 3 of construction:

- Works to accommodate an additional 950 students in the western wing of the building.

Vegetation management will be required to achieve the necessary APZ. The SSD does not seek approval for vegetation management outside the site boundary

The purpose of this **Stormwater Operation & Maintenance Plan** is for the maintenance and upkeep of the drainage infrastructure

Response to Submissions

This **Stormwater Operation & Maintenance Plan** has considered the issues raised by agencies during exhibition of SSD 8114 and subsequent Response to Submissions for Phase 1.

The preparation of this Operators Management manual is based on our understanding of the conditions of Ku-Ring-Gai Councils DCP

The Operation and Maintenance Manual is based on the following assumptions and exclusions, which must be carefully considered.

In undertaking the preparation of this report, EWFW hereby advised that it has no control over any approvals, additional 3rd party requirements, competitive development costs, nor does it have any control over any increase in statutory fees or future availability of external drainage services capacity.

This manual produced by EWFW will therefore be provided on a as is basis of its best judgement as an experienced and qualified engineering consultants, familiar with the stormwater industry.

1.2. CURRENT SITE LOCATION

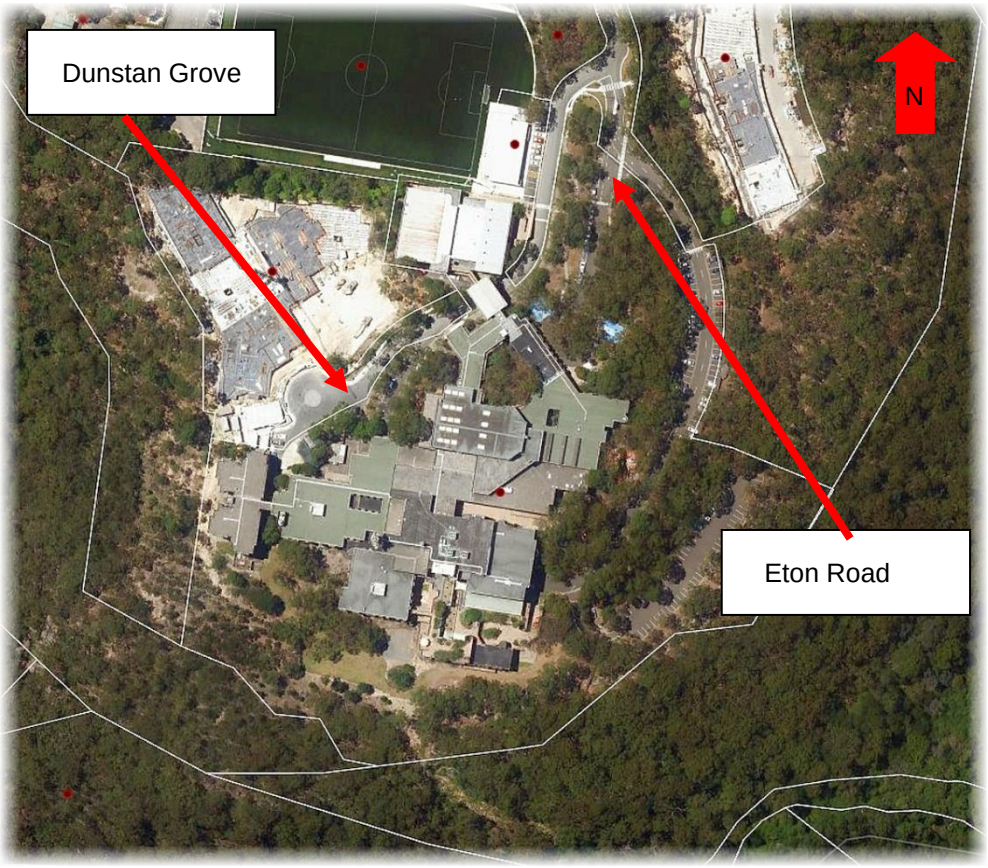


Figure 1.1 Site Location image

1.3. RECORDING AND REPORTING

The maintenance table below, shall be use to set up a record register kept by the asset site manager, and dilapidation of the site assets shall be recorded on this register.

1.4. CONTACT INFORMATION

Contact Information.

- Ku-Ring-Gai council for council assets - 02 9424 0000
- Site Asset Manager - DoE Asset Management Unit, Craig O Shea, 0412 453942

1.5. WORK HEALTH AND SAFETY

The maintenance contractor shall be responsible for his organisation health safety management systems, and a work statements shall be approve prior to commencement of any works.

1.6. GOVERNING AUTHORITIES

The following Governing Authorities and Regulations shall have jurisdiction over the services:

Authority
Local Council – Ku-Ring-Gai Council
NSW Dept. of Education – DoE Asset Management Unit.

2. MAINTENANCE SCHEDULE

2.1. MAINTENANCE SCHEDULE

Below is a maintenance table that has been tabulated into three (3), six (6), yearly and 5 yearly intervals.

The majority of the work is inspection and cleaning the various components of the OSD and environmental devices.

All devices control the discharge and water quality, to comply with councils DCP requirements

Any modifications to these devices can render the owner to criminal prosecution under the clean water act or council's DCP requirements.

Dept of Education will appoint a Maintenance Contractor who shall be responsible for the pit, pipe, and all drainage infrastructure within the site highlighted,

2.2. MAINTENANCE TABLE

RECOMMENDED MAINTENANCE SCHEDULE

STORM WATER DRAINAGE PITS & PIPE	**FREQUENCY**	**RESPONSIBILITY**	**PROCEDURE**
Ventilate pit prior to entry.	every time	All	Remove grates & Pit lids allow the pit to ventilate each inspection period
Inspect pit inlet and grating.	every time / Six monthly	Maintenance contractor	Inspect grating, pit lids, and lintels for damage and replace if necessary.
Inspect internal trash basket	Six monthly	Maintenance contractor	Remove pit trash baskets inspect for damage and replace if necessary. Empty and dispose of collected trash and re-install baskets
Pit Inspection	Annually	Maintenance contractor	Inspect pit for cracking and damage, remediate damage and check pipe collar for separation. Visually inspect pipe with mirror Upstream and Downstream to check for blockages. Check step irons for damage or loose iron, replace steps if necessary.
Inspect Sub soil inlet pipe	Annually	Maintenance contractor	Inspect subsoil pipe for blockages, and flush or rod inlet if necessary.
Pipe Blockages	Annually	Maintenance contractor	If pipe are blocked to be hydro jetted until blockage is cleared.
Pipe Inspection	Every 10 yrs	Maintenance contractor	Pipes to be inspected by CCTV for damage and wear, if damage or wear is found consider relining sleeve or Replacement of pipe.
GPT (if installed)	**FREQUENCY**	**RESPONSIBILITY**	**PROCEDURE**
Ventilate GPT prior to entry.	every time	All	Remove grates & Pit lids allow the GPT to ventilate each inspection period
Inspect pit lid, grating inlet, and outlet	every time / Annually	Maintenance contractor	Inspect grating, pit lids, and inlet and outlet for damage, repair or replace if necessary.
Dewater trap	Annually	Maintenance contractor	De water GPT

Inspect internal trash basket	Annually	Maintenance contractor	Remove pit trash baskets inspect for damage and replace if necessary. Empty and dispose of collected trash and re-install basket
Inspect internal GPT	Annually	Maintenance contractor	Inspect internal GPT for structural damage, repair or replace if necessary.

RECOMMENDED MAINTENANCE SCHEDULE (Continued)

ON SITE DETENTION (OSD) / RAIN WATER TANK (if installed)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Ventilate tank prior to entry.	every time	All	Remove grates & Pit lids allow the tank to ventilate each inspection period
Inspect flap valve and remove any blockage.	Six monthly	Maintenance contractor	Remove grate. Ensure flap valve moves freely and remove any blockages or debris.
Inspect screen and clean.	Six monthly	Maintenance contractor	Remove grate and screen if required and clean it.
Inspect & remove any blockage of orifice.	Six monthly	Maintenance contractor	Remove grate & screen to inspect orifice.
Inspect dcp sump & remove any sediment -sludge.	Six monthly	Maintenance contractor	Remove grate and screen. Remove sediment/sludge build-up and check orifice and flap valve clear.
Inspect grate for damage or blockage.	Six monthly	Maintenance contractor	Check both sides of grate for corrosion, (especially corner and welds) damage or blockage.
Inspect return pipe from storage and return any blockage.	Six monthly	Maintenance contractor	Remove grate and screen. Ventilate underground storage if present. Open flap valve and remove any blockage in return line. Check for sludge/debris on upstream side of return line.
Inspect outlet pipe and remove any blockage	Six monthly	Maintenance contractor	Remove grate and screen. Ventilate underground storage if present. Check orifice and remove any blockages in outlet pipe. Flush outlet pipe to confirm it drains freely. Check for sludge/debris on upstream side of return line.
Check fixing of step irons is secure.	Six monthly	Maintenance contractor	Remove grate and ensure fixings secure prior to placing weight on step iron. Replace if damaged
Inspect overflow weir & remove any blockage.	Six monthly	Maintenance contractor	Remove grate and open cover to ventilate underground storage if present. Ensure weir clear of blockages.
Empty basket at overflow weir (if present)	Six monthly	Maintenance contractor	Remove grate and ventilate underground storage chamber if present. Empty basket, check fixing secure and not corroded.
Check attachment of orifice plate to wall of pit(gaps less	Annually	Maintenance contractor	Remove grate and screen. Ensure plate mounted securely, tighten fixings if required. Seal gaps as required.

than 5 mm)

Check attachment of screen to wall of pit.	Annually	Maintenance contractor	Remove grate and screen. Ensure screen fixings secure. Repair as required.
Check screen for corrosion.	Annually	Maintenance contractor	Remove grate and examine screen for rust or corrosion, especially at corners or welds.
Check attachment of flap valve to wall of.	Annually	Maintenance contractor	Remove grate. Ensure fixings of valve are secure.
Check flap valve seals against wall of pit.	Annually	Maintenance contractor	Remove grate. Fill pit with water and check that flap seals against side of pit with minimal leakage.
Check any hinges of flap valve move freely.	Annually	Maintenance contractor	Remove grate. Test valve hinge by moving flap to full extent.
Inspect dcp walls (internal and external, if appropriate) for cracks for spalling.	Annually	Maintenance contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Check step irons for corrosion.	Annually	Maintenance contractor	Remove grate. Examine step irons and repair any corrosion or damage.
Check orifice diameter correct and retains sharp edge.	Five yearly	Maintenance contractor	Compare diameter to design (see work-as-executed) and ensure edge is not pitted or damaged.

RECOMMENDED MAINTENANCE SCHEDULE (Continued)

DISCHARGE CONTROL PIT (DCP) (if installed)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Inspect & remove any blockage of orifice.	Six monthly	Maintenance contractor	Remove grate and screen. Remove sediment/sludge build-up
Check orifice diameter correct and retains sharp edge.	Six monthly	Maintenance contractor	Remove blockage from grate and check if pit blocked.
Inspect screen and clean.	Six monthly	Maintenance contractor	Remove debris and floatable material likely to be carried to grates.
Check attachment of orifice plate to wall of pit(gaps less than 5 mm)	Annually	Maintenance contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Check attachment of screen to wall of pit.	Five yearly	Maintenance contractor	Compare actual storage available with work-as executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Check wall of pit.	Five yearly	Maintenance contractor	Check along drainage lines and at pits for subsidence likely to indicate leakages, or cracks in wall

RECOMMENDED MAINTENANCE SCHEDULE (Continued)

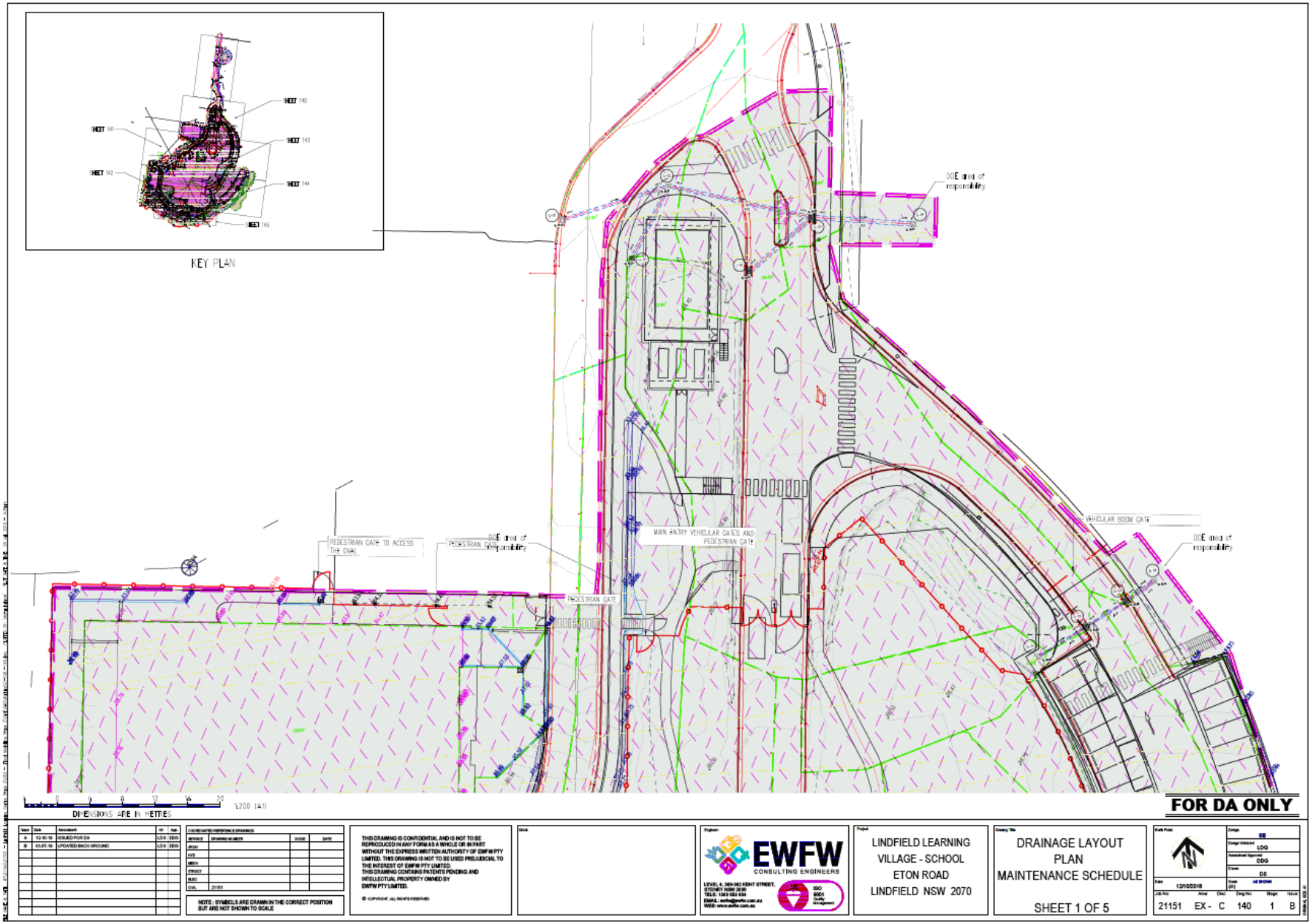
RAIN GARDEN & Dry Basins (if installed)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Inspect & remove any trash and particulates such as cigarette butts	Three monthly	Maintenance contractor	Remove trash build-up, dead leaf matter and non biodegradable matter
Check plants	Three monthly	Maintenance contractor	Remove and replace any dead plants. Remove any weeds by hand. No usage of any herbicides.
Inspect screen and clean.	Six monthly	Maintenance contractor	Remove debris and floatable material likely to be carried to grates.
Inspect internal pit remove trash and sludge	Six monthly	Maintenance contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from internal walls if necessary remove sediment or sludge from pit
Ensure receiving pipe are clear and undamaged	Six monthly	Maintenance contractor	Compare actual storage available with work-as executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Check pit lids for damage and is secure	Annually	Maintenance contractor	Remove blockage from grate and check if pit blocked. Damage to pit lid check for corrosion
Check step irons for corrosion.	Annually	Maintenance contractor	Remove grate. Examine step irons and repair any corrosion or damage.

RECOMMENDED MAINTENANCE SCHEDULE (Continued)

Sediment/ Setting Ponds Basins (if installed)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Treat pond with flocculants	every time or as indicated	Maintenance contractor	Treat pond with a flocculent, to reduce water turbidity, 48 hours prior to dewatering. Only if rain is not forecasted for a min of 72hrs.
De water ponds	every time or as indicated	Maintenance contractor	De water pond and allow to dry, remove settle and trapped sediment
Inspect walls and outlet/overflow weir for damage	every time after rainfall event	Maintenance contractor	Inspect walls and outlet/overflow weir for damage or scouring. Repair and make good all damaged items Check sediment levels, for required a possible clean out
Inspect filters and soak away	every time after rainfall event	Maintenance contractor	Inspect for damage, repair and make good all damaged items
Inspect filter bales	every time after rainfall event	Maintenance contractor	Inspect for damage, repair and make good all damaged items
Inspect fences	every time after rainfall event	Maintenance contractor	Inspect for damage, repair and make good all damaged items

3. APPENDICES

3.1. DRAWINGS


KEY PLAN
SHEET 140
SHEET 141
SHEET 142
SHEET 143
SHEET 144
SHEET 145
BOE area of responsibility
PEDESTRIAN GATE TO ACCESS THE OVAL
PEDESTRIAN GATE
MAIN ENTRY VEHICULAR GATES AND PEDESTRIAN GATE
VEHICULAR BOOM GATE
DIMENSIONS ARE IN METRES
FOR DA ONLY
THIS DRAWING IS CONFIDENTIAL AND IS NOT TO BE REPRODUCED IN ANY FORM AS A WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN AUTHORITY OF EWFW PTY LIMITED. THIS DRAWING IS NOT TO BE USED PREJUDICIAL TO THE INTEREST OF EWFW PTY LIMITED.
THIS DRAWING CONTAINS PATENTS PENDING AND INTELLECTUAL PROPERTY OWNED BY EWFW PTY LIMITED.
NOTE : SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE
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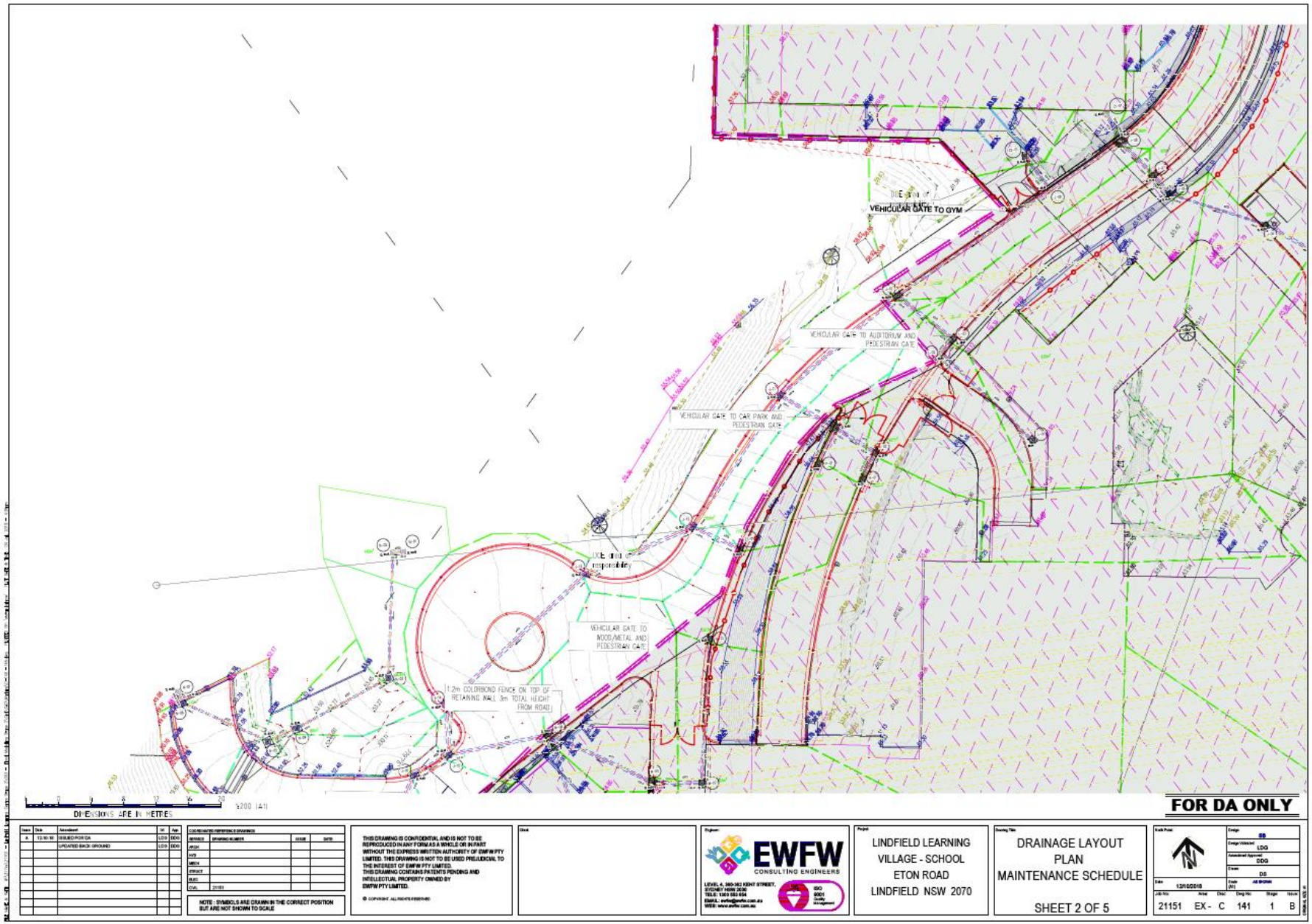
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070
DRAINAGE LAYOUT PLAN
MAINTENANCE SCHEDULE
SHEET 1 OF 5
21151 EX - C 140 1 B


VEHICULAR GATE TO GYM
VEHICULAR GATE TO AUDITORIUM AND PEDESTRIAN GATE
VEHICULAR GATE TO CAR PARK AND PEDESTRIAN GATE
VEHICULAR GATE TO WOOD/METAL AND PEDESTRIAN GATE
1.2m COLORBOND FENCE ON TOP OF RETAINING WALL 3m TOTAL HEIGHT FROM ROAD
DIMENSIONS ARE IN METRES
FOR DA ONLY
EWFW
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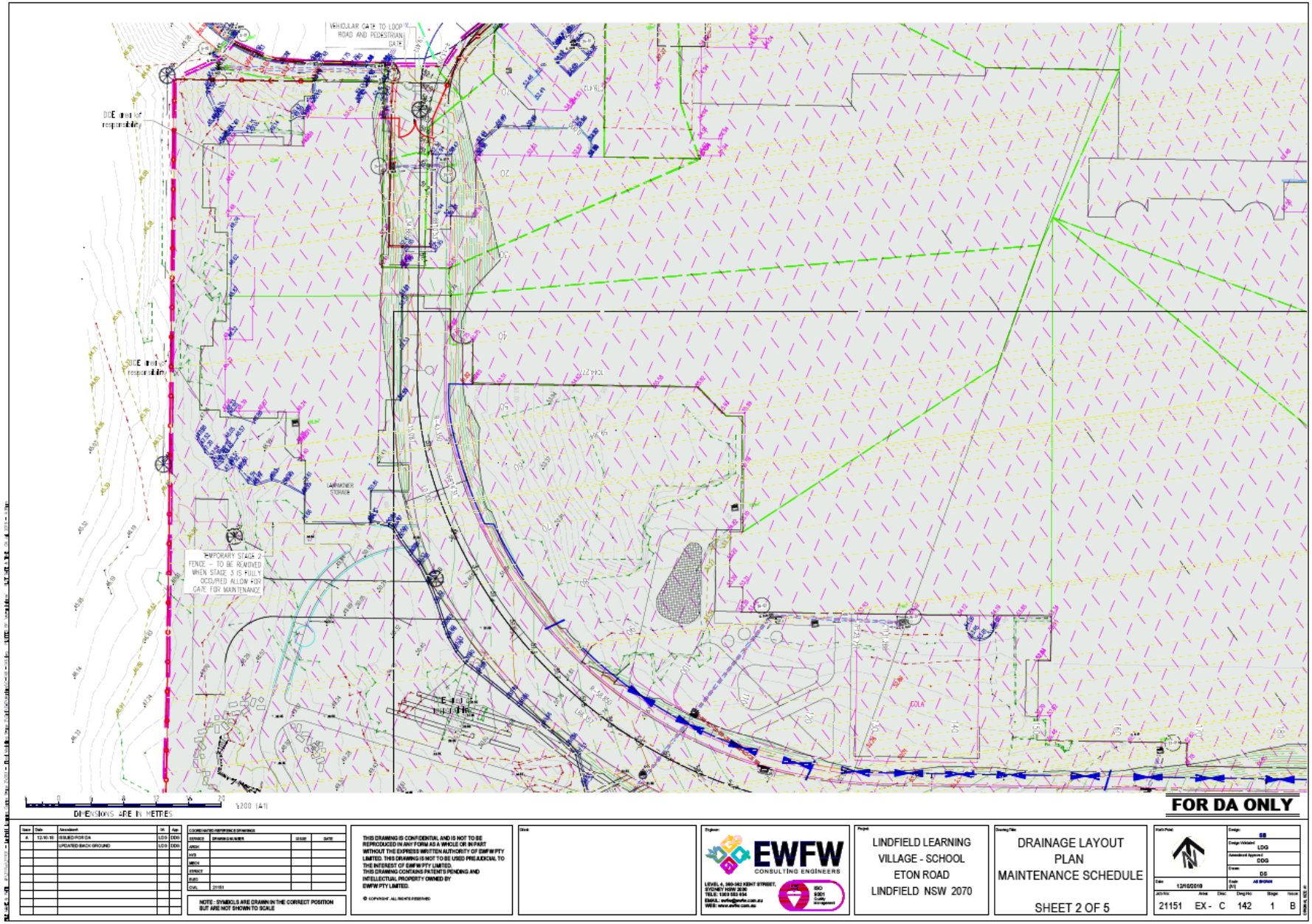
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070
DRAINAGE LAYOUT PLAN
MAINTENANCE SCHEDULE
SHEET 2 OF 5
21151 EX- C 141 1 B


VEHICULAR GATE TO LOOP ROAD AND PEDESTRIAN GATE
DOE area of responsibility
DOE area of responsibility
TEMPORARY STAGE 2 FENCE - TO BE REMOVED WHEN STAGE 3 IS FULLY OCCUPIED ALLOW FOR GATE FOR MAINTENANCE
DIMENSIONS ARE IN METRES
FOR DA ONLY
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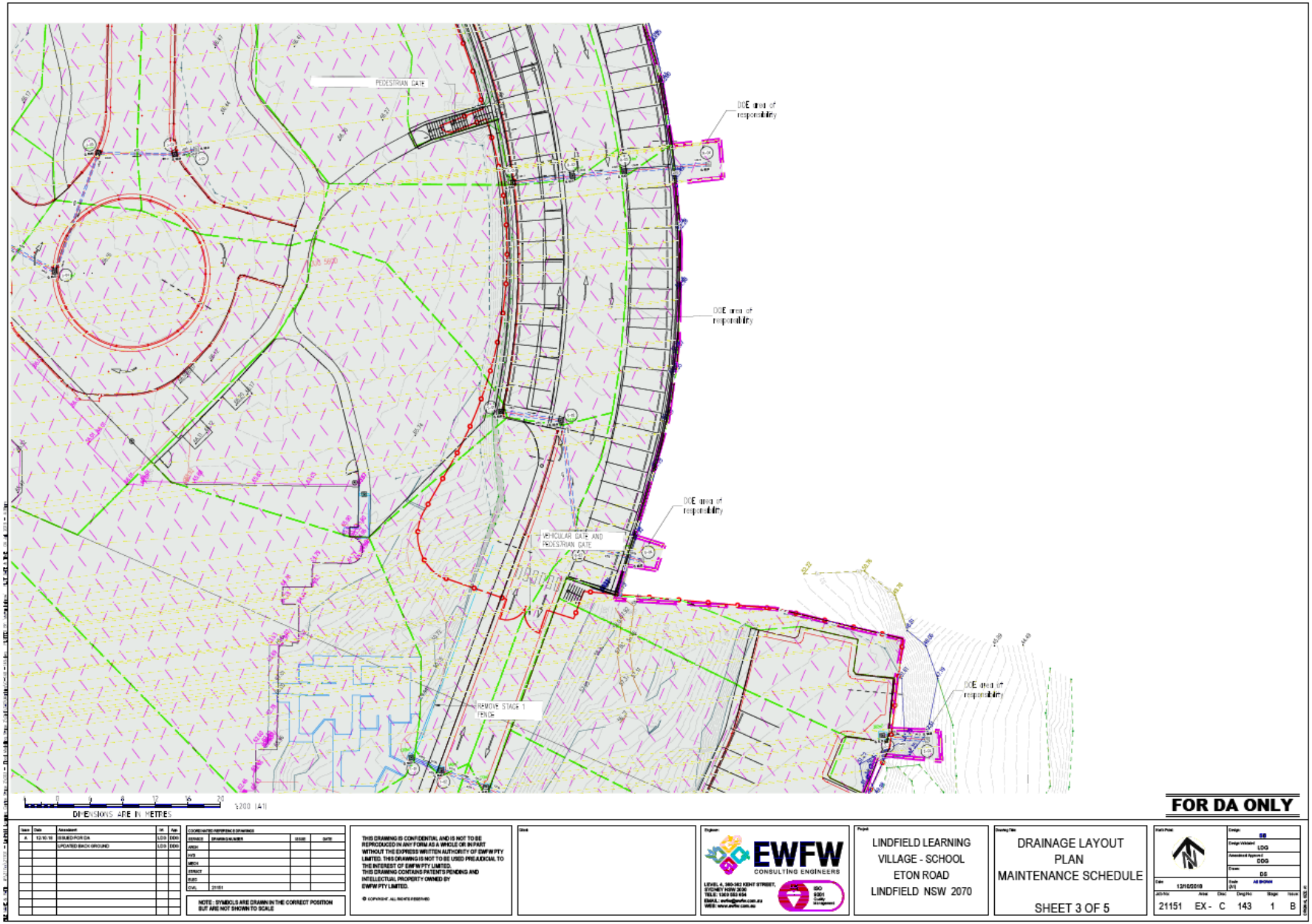
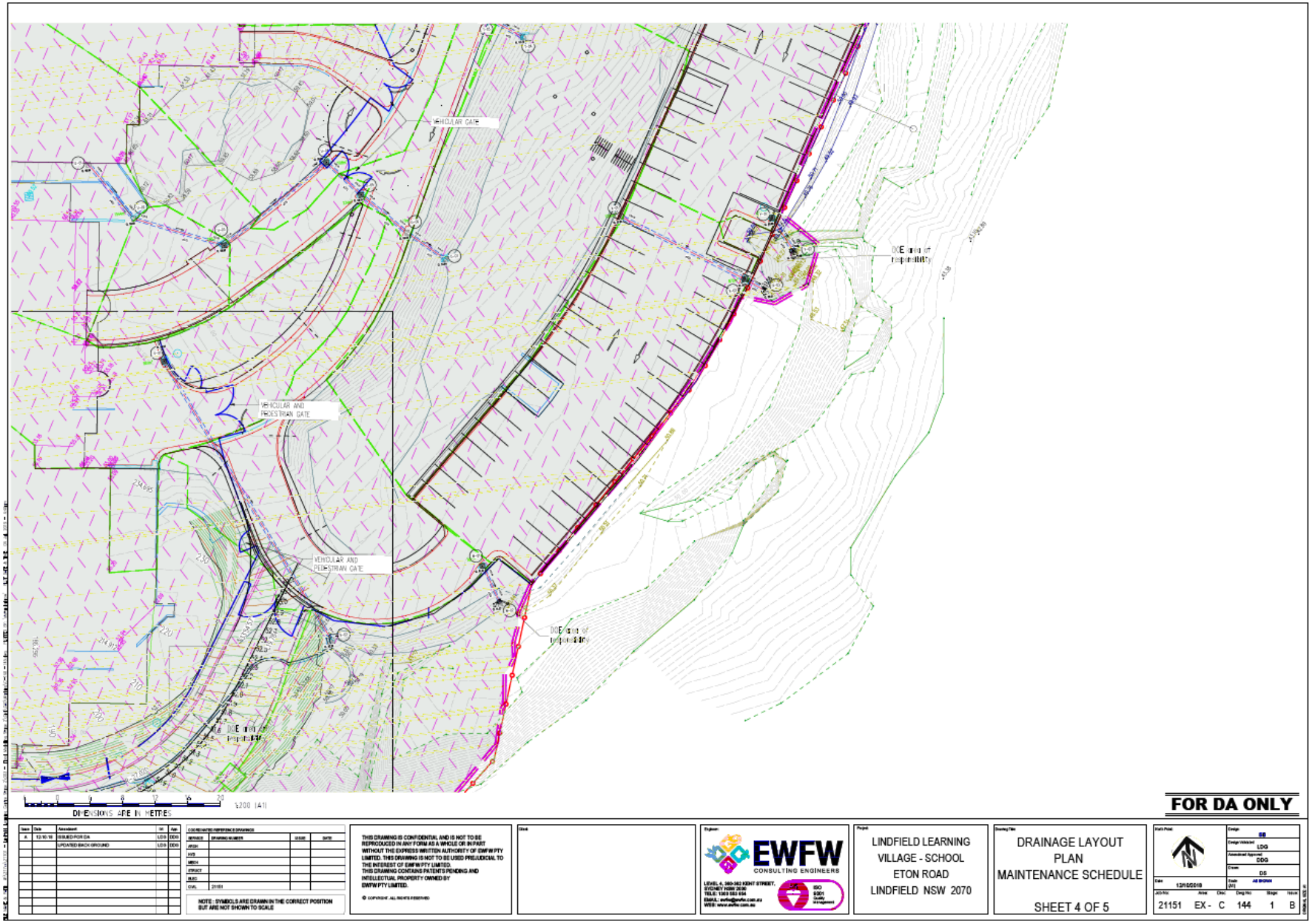
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070
DRAINAGE LAYOUT PLAN
MAINTENANCE SCHEDULE
SHEET 2 OF 5
21151 EX - C 142 1 B


PEDESTRIAN GATE
DOE area of responsibility
DOE area of responsibility
DOE area of responsibility
VEHICULAR GATE AND PEDESTRIAN GATE
DOE area of responsibility
REMOVE STAGE 1 FENCE
DIMENSIONS ARE IN METRES
FOR DA ONLY
EWFW
CONSULTING ENGINEERS
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070
DRAINAGE LAYOUT PLAN
MAINTENANCE SCHEDULE
SHEET 3 OF 5
21151 EX - C 143 1 B


VEHICULAR GATE
VEHICULAR AND PEDESTRIAN GATE
VEHICULAR AND PEDESTRIAN GATE
DIMENSIONS ARE IN METRES
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LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
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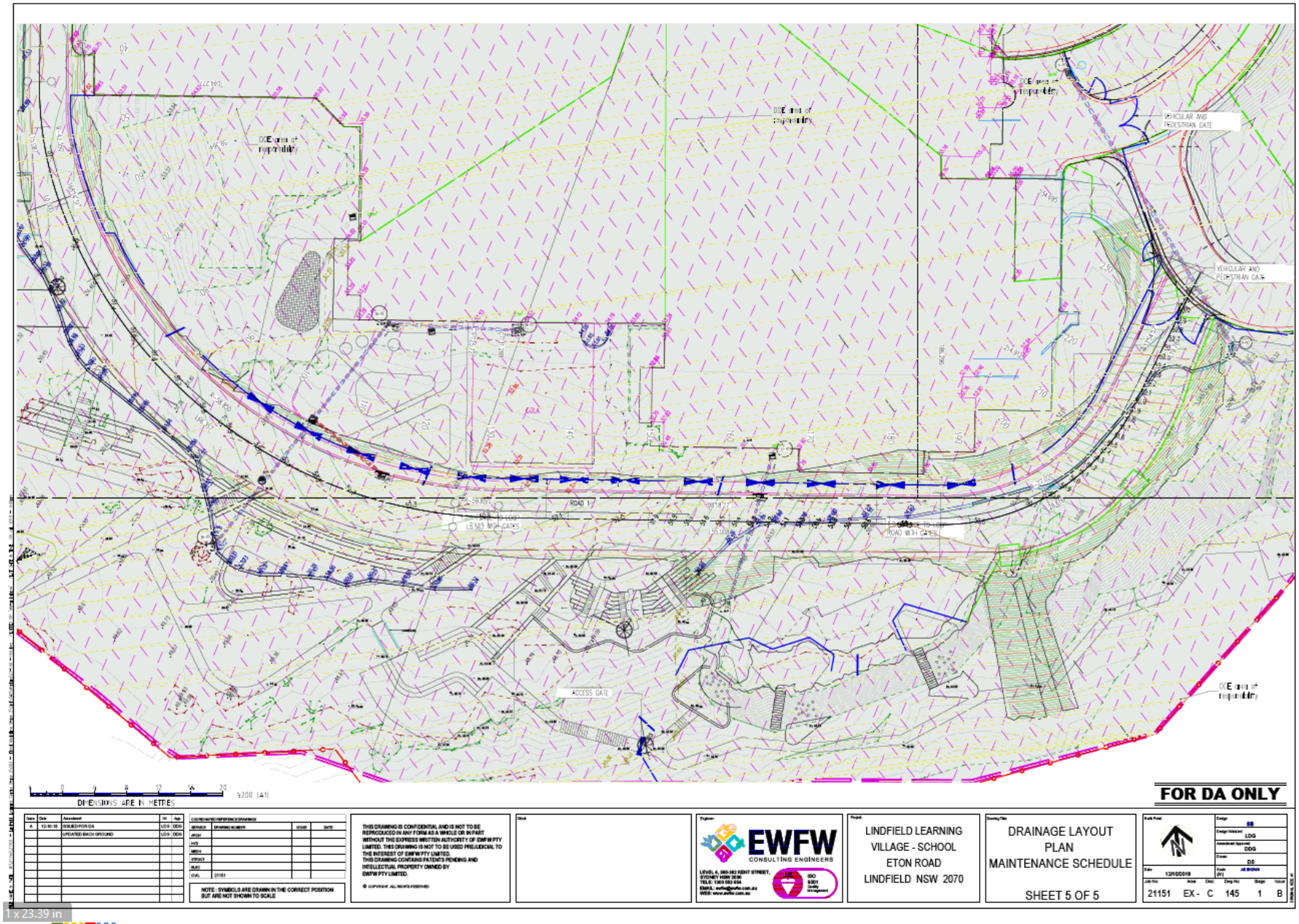
DRAINAGE LAYOUT PLAN
MAINTENANCE SCHEDULE
SHEET 4 OF 5
21151 EX - C 144 1 B


VEHICULAR AND PEDESTRIAN GATE
VEHICULAR AND PEDESTRIAN GATE
ROAD 1
ACCESS GATE
DIMENSIONS ARE IN METRES
FOR DA ONLY
EWFW
CONSULTING ENGINEERS
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070
DRAINAGE LAYOUT PLAN
MAINTENANCE SCHEDULE
SHEET 5 OF 5
21151 EX - C 145 1 B

3.2. PIT AND PIPE SCHEDULE

Below is the pit type, locations and pipe lengths

PIT / NODE DETAILS

Name	Family	Easting	Northing	Surface Elev (m)
F-01	1.8m lintel	329772.433	6259806.116	64.667
F-02	1.8m lintel	329779.727	6259808.761	64.649
F-03	HW 525	329782.814	6259810.036	64.854
G-01	1.8m lintel	329750.291	6259778.098	65.15
G-02	Junction Pit 900x900	329763.813	6259780.543	65.206
G-03	1.8m lintel	329780.788	6259774.462	64.902
G-04	HW 525	329793.026	6259772.026	63.14
H-01	Surface Inlet Pit 600x900	329758.231	6259772.344	65.341
I-01	1.8m lintel	329772.244	6259768.759	64.967
J-01	Surface Inlet Pit 600x600	329771.34	6259688.801	66.406
J-02	1.8m lintel	329768.704	6259688.499	65.939
J-03	1.8m lintel	329759.359	6259689.858	65.952
J-04	1.8m lintel	329752.256	6259676.125	65.721
J-05	1.8m lintel	329742.512	6259683.343	65.551
J-06	Surface Inlet Pit 600x900	329731.389	6259688.531	61.241
J-07	1.8m lintel	329729.699	6259691.088	61.095
J-08	1.8m lintel	329726.15	6259695.864	61.081

J1-01	Surface Inlet Pit 900x900	329625.374	6259622.061	52.039
J1-02	1.8m lintel	329605.334	6259625.075	49.232
K-01	1.8m lintel	329689.364	6259658.653	57.699
K-02	1.8m lintel	329691.396	6259661.753	57.874
K-03	1.8m lintel	329686.888	6259665.355	57.895
K-04	1.8m lintel	329680.752	6259670.161	57.808
L-01	1.8m lintel	329710.74	6259660.644	60.441
L-02	Surface Inlet Pit 600x600	329701.139	6259672.71	58.839
L-03	1.8m lintel	329702.767	6259674.204	58.972
L-04	1.8m lintel	329696.553	6259680.472	58.981
M-01	1.8m lintel	329668.34	6259641.513	55.288
M-02	1.8m lintel	329665.07	6259624.172	54.508
M-03	1.8m lintel	329659.009	6259625.035	54.642
M-04	1.8m lintel	329647.46	6259632.456	53.64
M-05	1.8m lintel	329634.75	6259631.628	52.423
Q-01	Surface Inlet Pit 600x900	329801.418	6259717.379	64.195
Q-02	1.8m lintel	329807.633	6259720.263	63.901
Q-03	1.8m lintel	329812.958	6259722.756	63.981
Q-04	HW 375	329816.654	6259724.783	64.139
R-01	Surface Inlet Pit 600x900	329809.352	6259679.753	61.832
R-02	1.8m lintel	329816.756	6259679.545	61.711
R-03	1.8m lintel	329823.249	6259679.341	61.83
R-04	HW 375	329833.429	6259678.86	62.01
S-01	Surface Inlet Pit 600x900	329804.322	6259652.057	60.608

S-02	Surface Inlet Pit 600x900	329811.492	6259649.953	60.456
S-03	1.8m lintel	329811.524	6259634.83	60.074
S-04	HW 375	329818.998	6259631.665	60.02
T-01	Surface Inlet Pit 600x900	329787.862	6259611.285	59.068
T-02	1.8m lintel	329791.34	6259609.312	58.934
T-03	1.8m lintel	329796.5	6259606.558	58.929
T-04	HW 450	329800.724	6259603.546	57.7
U-01	Surface Inlet Pit 600x600	329745.912	6259594.756	60.556
U-02	Interallotment Pit 600x900	329750.463	6259587.572	59.889
U-03	1.8m lintel	329761.084	6259582.85	58.8
U-04	Surface Inlet Pit 600x900	329774.786	6259591.412	58.255
U-05	Surface Inlet Pit 600x900	329778.562	6259586.843	58.188
U-06	1.8m lintel	329783.525	6259581.511	58.087
U-07	1.8m lintel	329787.769	6259577.704	54.94
V-01	Surface Inlet Pit 600x900	329751.871	6259569.713	54.967
V-02	HW 375	329767.94	6259532.95	52.24
W-01	1.8m lintel	329787.476	6259539.748	51.326
W-02	HW 375	329788.999	6259534.84	51.27
X-01	Surface Inlet Pit 600x900	329809.81	6259580.074	51.544
X-02	Surface Inlet Pit 600x900	329824.051	6259570.422	50.508
X-03	HW 450	329826.268	6259568.737	50.211

Z-01	Surface Inlet Pit 900x900	329845.549	6259606.48	51.727
Z-02	HW 450	329848.586	6259605.849	50.885
Z1-01	1.8m lintel	329724.962	6259699.291	65.397
Z1-02	1.8m lintel	329726.15	6259695.864	61.081
Z2-01	1.8m lintel	329714.305	6259695.393	61.057
Z2-02	1.8m lintel	329716.808	6259691.132	60.424
Z3-01	1.8m lintel	329673.463	6259652.052	56.282
Z3-02	1.8m lintel	329668.022	6259655.537	56.271
Z4-01	1.8m lintel	329648.905	6259622.499	54.805
Z5-01	Surface Inlet Pit 900x900	329631.015	6259609.736	52.138
Z5-02	Surface Inlet Pit 900x900	329624.88	6259610.271	52.25
Z6-01	Surface Inlet Pit 600x600	329679.788	6259546.721	53.97
Z6-02	Surface Inlet Pit 600x900	329663.918	6259549.657	53.548
Z6-02B	Surface Inlet Pit 600x900	329643.870	625529.970	51.800
Z6-03	HW 300	329638.847	6259525.033	50.775
Z7-01	Surface Inlet Pit 600x600	329709.173	6259527.106	51.985
Z7-01B	1.8m lintel	329704.374	6259516.307	51.245
Z7-02	HW 300	329701.268	6259509.317	49.414

PIPE DETAILS

Name	To	Pipe Length (m)	U/S IL (m)	D/S IL (m)	Slope (%s)	Type Pipe Calss	Dia (mm)
P F-01	F-02	7.758	63.555	63.35	2.642	3	375
P F-02	F-03	3.34	63.29	63.17	3.593	3	375
P G-01	G-02	13.742	63.96	63.505	3.311	3	375
P G-02	G-03	18.031	63.465	63.14	1.802	3	375
P G-03	G-04	12.478	63.06	62.66	3.206	3	525
P H-01	G-02	9.919	63.835	63.525	3.125	3	450
P I-01	G-03	10.272	63.3	63.14	1.558	3	450
P J-01	J-02	2.653	65.205	65.15	2.073	3	225
P J-02	J-03	9.444	65.13	65.03	1.059	3	225
P J-03	J-04	15.461	65.01	64.84	1.1	3	225
P J-04	J-05	12.127	64.81	64.08	6.02	3	375
P J-05	J-06	12.272	64.05	60.095	32.227	3	225
P J-06	J-07	3.066	60.095	59.91	6.034	3	375
P J-07	J-08	5.95	59.91	59.8	1.849	3	375
P J1-01	J1-02	20.266	49.555	48.62	4.614	3	450
P K-01	K-02	3.707	57.03	56.83	5.395	3	300
P K-02	K-03	5.77	56.475	56.325	2.6	3	375
P K-03	K-04	7.795	56.325	56.13	2.502	3	375
P L-01	L-02	15.42	59.2	57.82	8.949	3	300
P L-02	L-03	2.21	57.87	57.82	2.263	3	300
P L-03	L-04	8.826	57.76	57.605	1.756	3	375
P M-01	M-02	17.647	53.97	53.54	2.437	3	375
P M-02	M-03	6.123	53.49	53.46	0.49	3	375
P M-03	M-04	13.727	53.37	52.945	3.096	3	375
P M-04	M-05	12.738	52.025	51.465	4.396	3	375
P Q-01	Q-02	6.852	62.465	61.76	10.289	3	225
P Q-02	Q-03	5.88	61.555	61.13	7.228	3	225

P Q-03	Q-04	4.216	60.985	60.685	7.116	3	375
P R-01	R-02	7.407	60.17	59.99	2.43	3	375
P R-02	R-03	6.497	59.95	59.865	1.308	3	375
P R-03	R-04	10.191	59.86	59.74	1.178	3	375
P S-01	S-02	7.472	59.51	59.284	3.034	3	375
P S-02	S-03	15.123	59	58.78	1.455	3	375
P S-03	S-04	8.117	58.76	58.66	1.232	3	375
P T-01	T-02	3.999	58.02	57.8	5.506	3	375
P T-02	T-03	5.849	57.735	57.57	2.821	3	375
P T-03	T-04	5.187	57.445	57.05	7.615	3	450
P U-01	U-02	8.504	58.64	58.21	5.056	3	450
P U-02	U-03	11.623	58.19	57.5	5.936	3	375
P U-03	U-04	16.157	57.4	56.84	3.466	3	375
P U-04	U-05	5.927	56.49	56.37	2.025	3	375
P U-05	U-06	7.285	56.26	55.34	12.629	3	375
P U-06	U-07	5.701	55.2	54.21	17.364	3	375
P V-01	V-02	40.122	53.085	51.405	4.187	3	375
P W-01	W-02	5.139	50.485	50.45	0.681	3	300
P X-01	X-02	17.204	50.3	49.67	3.662	3	450
P X-02	X-03	2.785	49.62	49.56	2.154	3	450
P Z-01	Z-02	3.102	49.35	49.02	10.639	3	450
P Z1-01	Z1-02	3.627	60.93	59.89	28.672	2	375
P Z2-01	Z2-02	4.942	59.89	59.47	8.498	3	300
P Z3-01	Z3-02	6.462	54.65	54.45	3.095	3	375
P Z4-01	M-04	10.061	53.658	52.628	10.231	3	375
P Z5-01	Z5-02	6.158	50.76	50.625	2.192	3	225
P Z5-02	J1-01	11.799	50.605	50.545	0.508	3	225
P Z6-01	Z6-02	16.139	52.751	52.333	2.589	3	300
P Z6-02	Z6-03	35.141	52.13	50.275	5.279	3	300
P Z7-01	Z7-02	19.467	50.69	48.28	12.38	3	300