

# PROPOSED MULTI-UNIT DEVELOPMENT 175-177 CLEVELAND STREET, REDFERN NSW

## STORMWATER CONCEPT PLAN



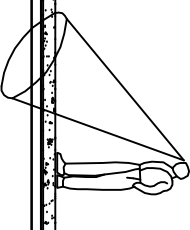
LOCALITY PLAN

DRAWING REGISTER	
No.	TITLE
SW01	COVER SHEET
SW02	STORMWATER DRAINAGE PLAN - BASEMENT
SW03	STORMWATER DRAINAGE PLAN - GROUND FLOOR / LEVEL 1 PLAN
SW04	STORMWATER DRAINAGE PLAN - ROOF PLAN
SW05	EROSION & SEDIMENT CONTROL - PLAN & DETAILS
SW06	DETAILS SHEET

Drawing Title		
COVER SHEET		
Project Number	Drawing Number	Revision Number
20140052	SW01	A
Sheet	1 OF 6	Issue FOR APPROVAL



SERVICES ON THIS DRAWING  
ARE SHOWN BELOW SLAB UNDO



**NOTES:**  
FINAL SUBSOIL DESIGN TO BE CARRIED OUT  
ONCE GEOTECHNICAL REPORT AND WATER  
TABLE LEVEL IS OBTAINED.

DOWNPIPE COLLECTING STORMWATER  
FROM LEVEL ABOVE (TYP.)

SUBSOIL PUMP-OUT PIT  
COMPLETE  
WITH 2x SURPRESSIBLE PUMPS WITH  
DUTY OF 10L/S AT 12m HEAD, FLOAT  
SWITCH AND CONTROL PANEL TO  
MANUFACTURER'S SPECIFICATIONS.  
REFER TO SECTION 4.1, 4.2 OF  
COUNCIL'S STORMWATER CODE

SUBSOIL PUMP-OUT PIT:  
RL:13.90  
1.2m DIA  
HEIGHT 1.2m  
VOLUME REQUIRED 0.312m³  
VOLUME PROVIDED 0.312m³

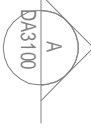
INSTALL 900SD HEAVY DUTY  
STEEL GRATED LID FOR ACCESS  
AND MAINTENANCE PURPOSES.

150mm uPVC CLASS 12

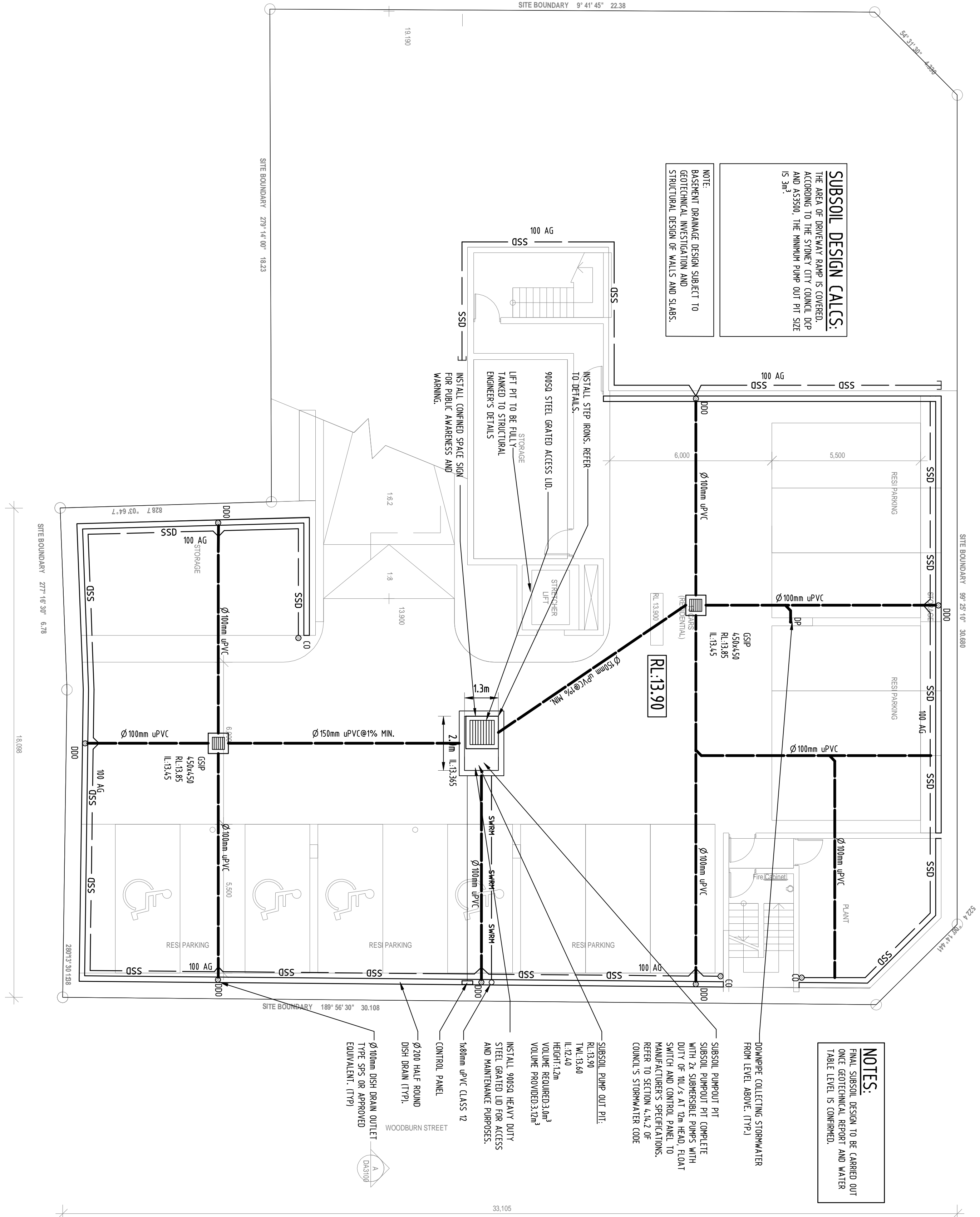
CONTROL PANEL

Ø 200 HALF ROUND  
DISH DRAIN (TYP.)

Ø 100mm DISH DRAIN OUTLET  
TYPE SPS OR APPROVED  
EQUIVALENT (TYP.)



EVELEIGH STREET



**SUBSOIL DESIGN CALCS:**  
THE AREA OF DRIVEWAY RAMP IS COVERED,  
ACCORDING TO THE STONEY CITY COUNCIL DCP  
AND ASS300, THE MINIMUM PUMP-OUT PIT SIZE  
IS 3m².

**NOTE:**  
BASEMENT DRAINAGE DESIGN SUBJECT TO  
GEOTECHNICAL INVESTIGATION AND  
STRUCTURAL DESIGN OF WALLS AND SLABS.

INSTALL STEP IRONS, REFER  
TO DETAILS.

900SD STEEL GRATED ACCESS LID.

LIFT PIT TO BE FULLY  
TANKED TO STRUCTURAL  
ENGINEER'S DETAILS

INSTALL CONCRETE SPACE SIGN  
FOR PUBLIC AWARENESS AND  
WARNING.

CLIENT  
HIGH QUALITY  
BUILDING PTY LTD

ARCHITECT  
**JPR**  
JPR Architects Pty Ltd  
Level 4, 50 Shawbury  
Street  
Stoney Creek NSW 1530  
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Fax: 451 2 9366  
www.jpra.com.au

CONSULTING ENGINEER  
**S&G**  
S&G CONSULTANTS PTY LIMITED  
14/16, 21/18 22/23  
Stirling Street  
Sydney NSW 2000  
Tel: 451 2 9366  
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PROJECT  
**PROPOSED MUL TI-UNIT  
DEVELOPMENT**  
175-177 CLEVELAND STREET,  
REDFERN NSW

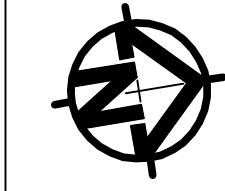
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Drawing Status  
**FOR APPROVAL**  
NOT TO BE USED FOR CONSTRUCTION PURPOSES  
**STORMWATER DRAINAGE PLAN**  
BASEMENT

Project No  
**20140052**  
Drawing No  
**SW02**  
Revision No  
**A**

Reference Coordination Drawing			
Discipline	Drawing Title and Number	Date	Rev.
ARCH	BA-2001	05.08.15	-
STRUCT			
ELEC			
MECH			
HYD			
LANDS			
CONC			
DATA			
ISSUED			
REVISION			
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3	REVISION	05.08.15	3
4	REVISION	05.08.15	4
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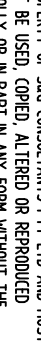

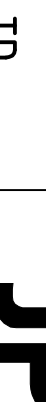
ENGINEERS  
AUSTRALIA  
MEMBERS



SCALE 1:100 ON ORIGINAL SIZE

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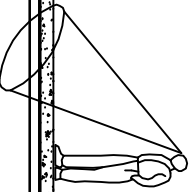


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<div>Scale</div> <div></div>		<div>CLIENT</div> <div>HIGH QUALITY BUILDING PTY LTD</div>	
<div>ARCHITECT</div> <div><div><div>JPR Architects Pty Ltd 100/100 Stirling Street East Sydney NSW 1585 Tel: +61 2 6066 1100 Fax: +61 2 6066 1100 AS/N: 52 256 001 003 www.jpra.com.au</div><div><b>JPR</b></div></div></div>		<div>CONSULTING ENGINEER</div> <div>S&amp;G CONSULTANTS PTY LIMITED</div>	
<div><div></div><div><div>Site A113, Level 1 20 LEVENINGTON DRIVE BELLA VISTA, NSW 2535 T: +61 2 8883 4239 F: +61 2 9672 6977 Email: <a href="mailto:mail@sgc.com.au">mail@sgc.com.au</a> Web: <a href="http://www.sgc.com.au">www.sgc.com.au</a></div></div></div>		<div>PROJECT</div> <div>PROPOSED MULTI-UNIT DEVELOPMENT 175-177 CLEVELAND STREET, RIFDEN NSW</div>	
<div><div>Drawn By</div><div>2014/0052</div></div>		<div><div>Project No</div><div>SW03</div></div>	
<div><div>Drawn Title</div><div>STORMWATER DRAINAGE PLAN GROUND FLOOR / LEVEL 1 PLAN</div></div>		<div><div>Revision No</div><div>A</div></div>	
<div>NOT TO BE USED FOR CONSTRUCTION PURPOSES</div>			
<div>FOR APPROVAL</div>			

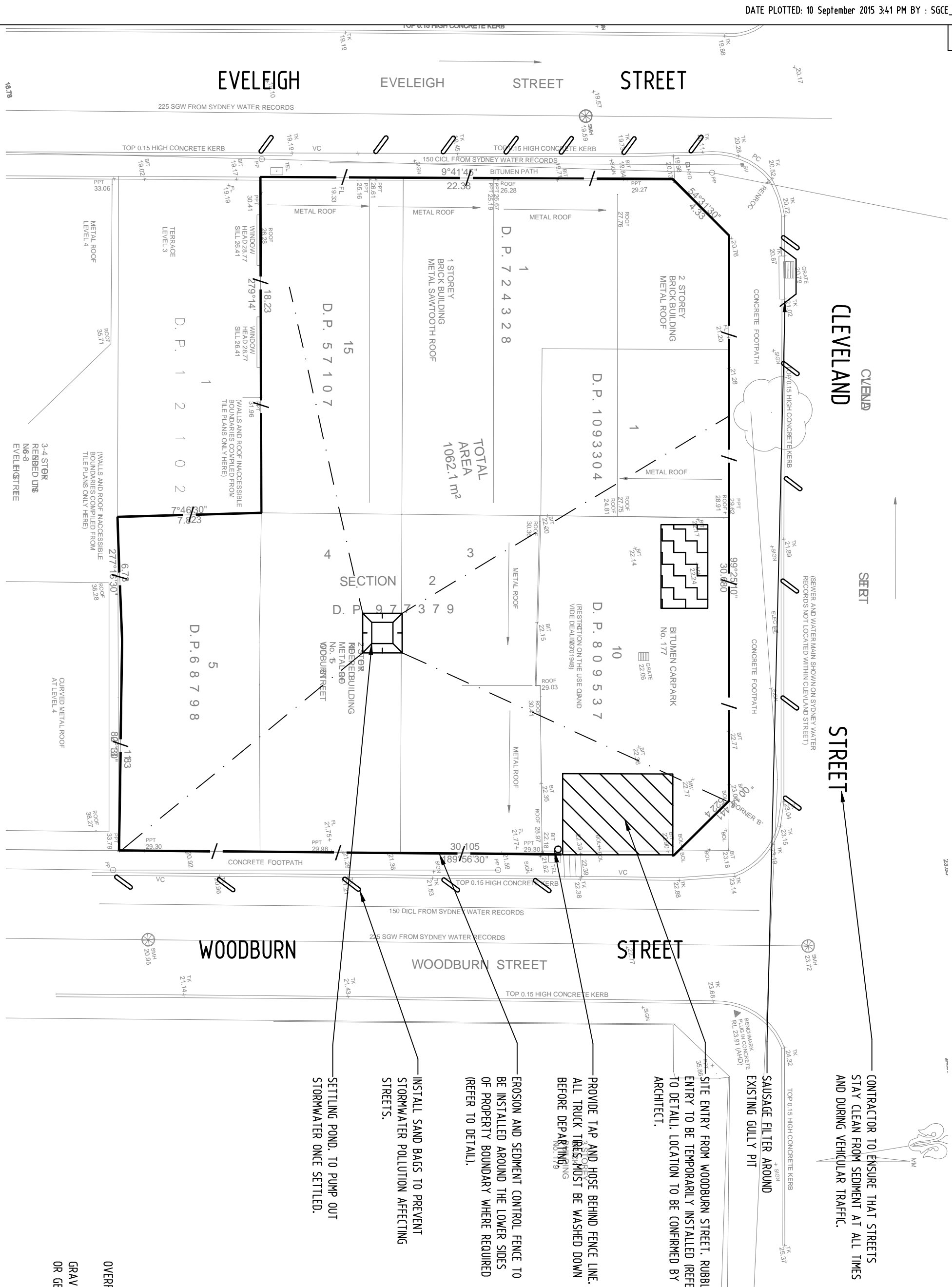


CLEVELAND STREET

SERVICES ON THIS DRAWING  
ARE SHOWN BELOW SLAB UNLO



Reference Coordination Drawing		Reference Coordination Drawing	
Discipline	Project Title and Number	Date	Rev.
ARCH	175-177	11/09/15	-
STRUCT			
MECH			
ELEC			
HYD			
LANDS			
CONV			
1-Interim	1-Interim	1-Interim	1-Interim
2-Development	2-Development	2-Development	2-Development
3-Construction	3-Construction	3-Construction	3-Construction
4-Final	4-Final	4-Final	4-Final
Issue internal sequence and revision history		Issue internal sequence and revision history	
Issue	Issue	Issue	Issue
1-Interim	1-Interim	1-Interim	1-Interim
2-Development	2-Development	2-Development	2-Development
3-Construction	3-Construction	3-Construction	3-Construction
4-Final	4-Final	4-Final	4-Final
Drawing Status		Drawing Status	
NOT TO BE USED FOR CONSTRUCTION PURPOSES	FOR APPROVAL	NOT TO BE USED FOR CONSTRUCTION PURPOSES	FOR APPROVAL
Project Title	Project Title	Project Title	Project Title
STORMWATER DRAINAGE PLAN	STORMWATER DRAINAGE PLAN	STORMWATER DRAINAGE PLAN	STORMWATER DRAINAGE PLAN
ROOF PLAN	ROOF PLAN	ROOF PLAN	ROOF PLAN
Project No	Project No	Project No	Project No
20140052	20140052	20140052	20140052
Sheet No	Sheet No	Sheet No	Sheet No
SW04	SW04	SW04	SW04
Revision No	Revision No	Revision No	Revision No
A	A	A	A



SITE PLAN  
SCALE 1:200

### EROSION & SEDIMENTATION CONTROL NOTES

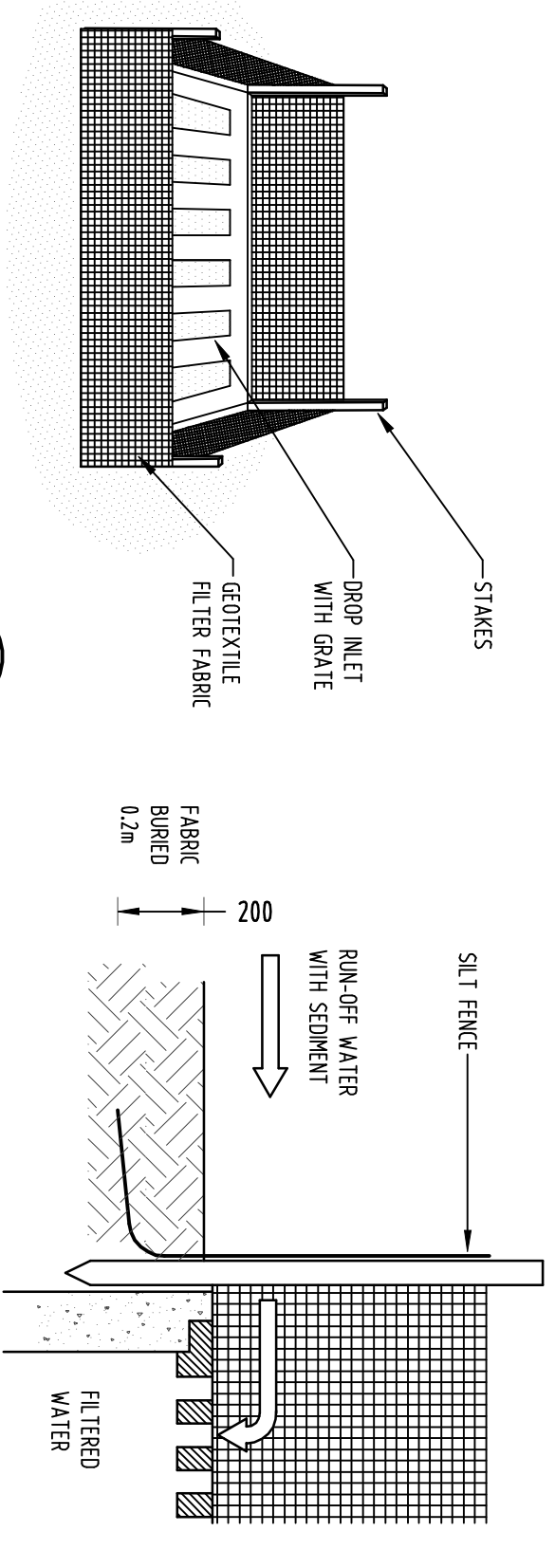
- CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. THE SEDIMENT FENCING SHALL BE CONSTRUCTED TO THE LINE OF THE SEDIMENT FENCING. SEDIMENT FENCING SHALL BE CONSTRUCTED TO THE LINE OF THE SEDIMENT FENCING. SEDIMENT FENCING SHALL BE CONSTRUCTED TO THE LINE OF THE SEDIMENT FENCING.
- EXISTING GRASS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
- NO PARKING OR STOCKPILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
- GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
- CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE SITE PLAN. THE ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE SITE PLAN. THE ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE SITE PLAN.

### GENERAL NOTES

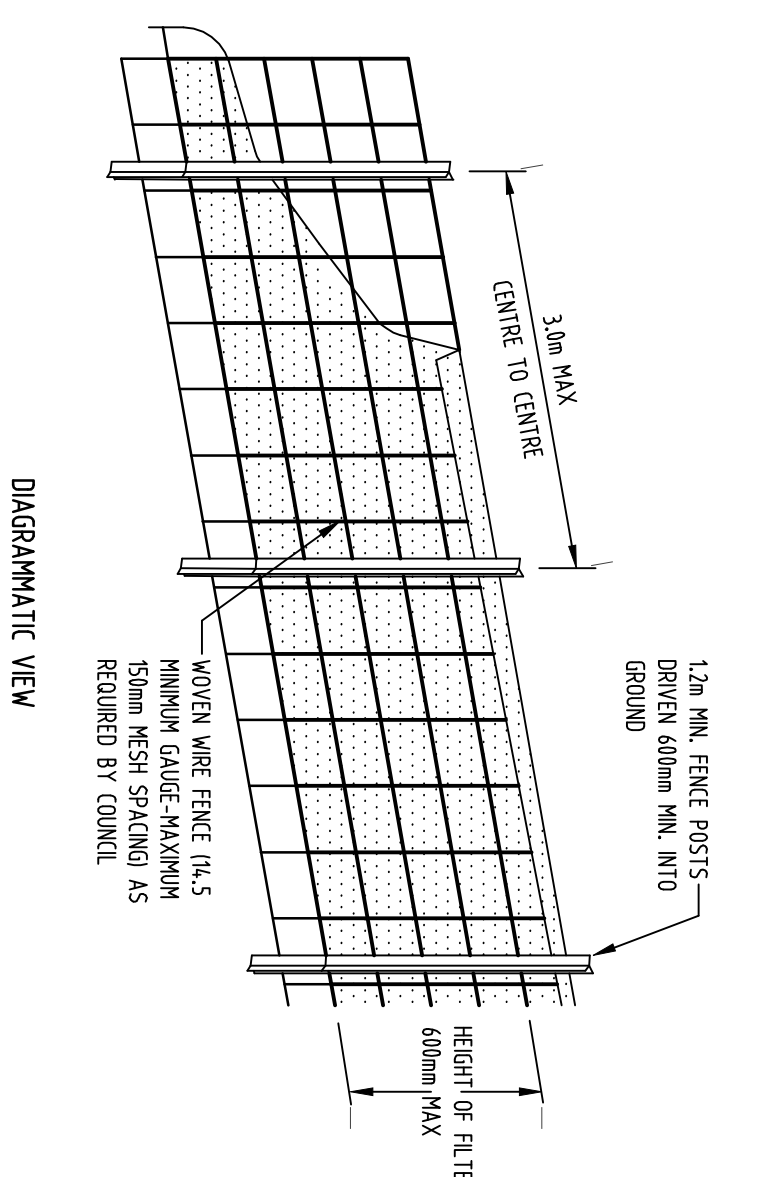
- THIS PLAN IS A CONCEPT PLAN ONLY FOR STORMWATER DISPOSAL & EROSION CONTROL. IT IS NOT SUITABLE FOR CONSTRUCTION. THIS PLAN SHOULD BE ADAPTED BY THE BUILDING DESIGNER DURING EXCAVATION & CONSTRUCTION PHASES TO ENSURE ADEQUATE PERFORMANCE.
- ALL DRAINAGE LAYOUT & DETAILS ARE DIAGNOMATIC & INDICATIVE ONLY. ACTUAL LOCATION, SIZES, LEVELS & GRADIENTS MAY ALTER WHEN DETAIL DESIGN WORKS ARE DOCUMENTED.

### CLAY SOILS

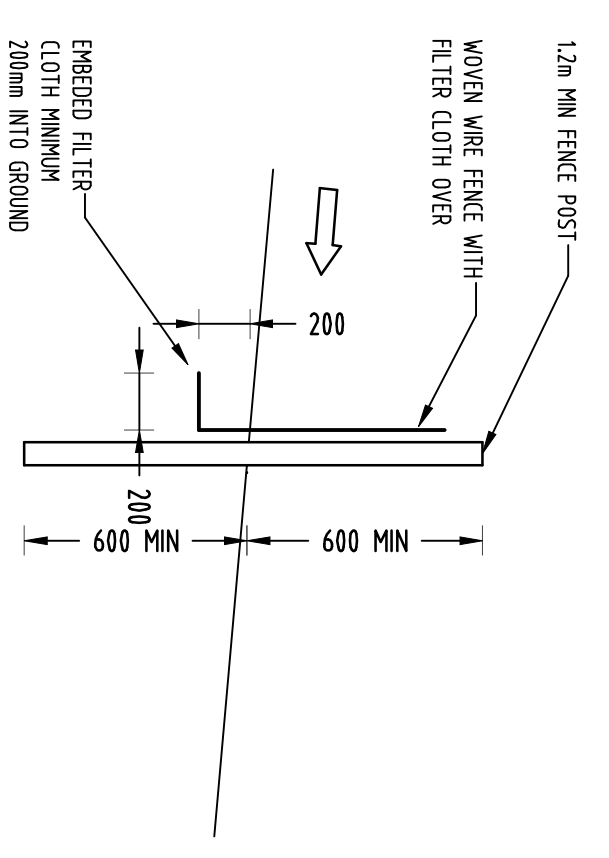
- A SYSTEM SHALL BE INSTALLED TO EITHER:
  - TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOLIDS FROM SITE VIA BUMP TRUCKS.
  - TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 5 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT ACT (POED 1971) AND SHALL BE APPROVED BY LOCAL COUNCIL.



2 DETAIL  
SUMP SEDIMENT TRAP  
NOT TO SCALE

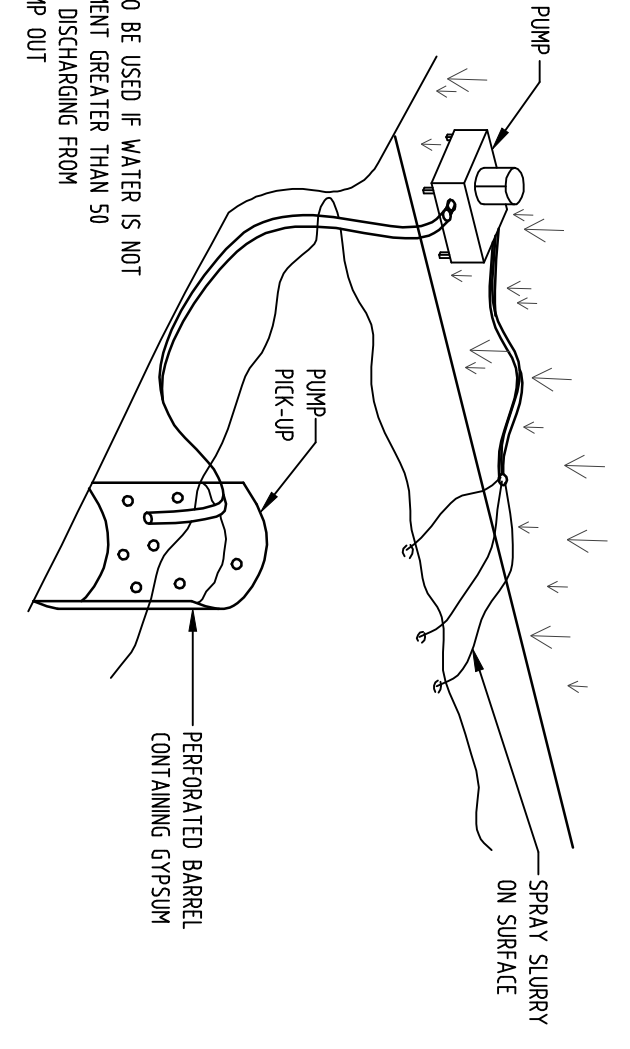


DIAGNOMATIC VIEW



TYPICAL SECTION

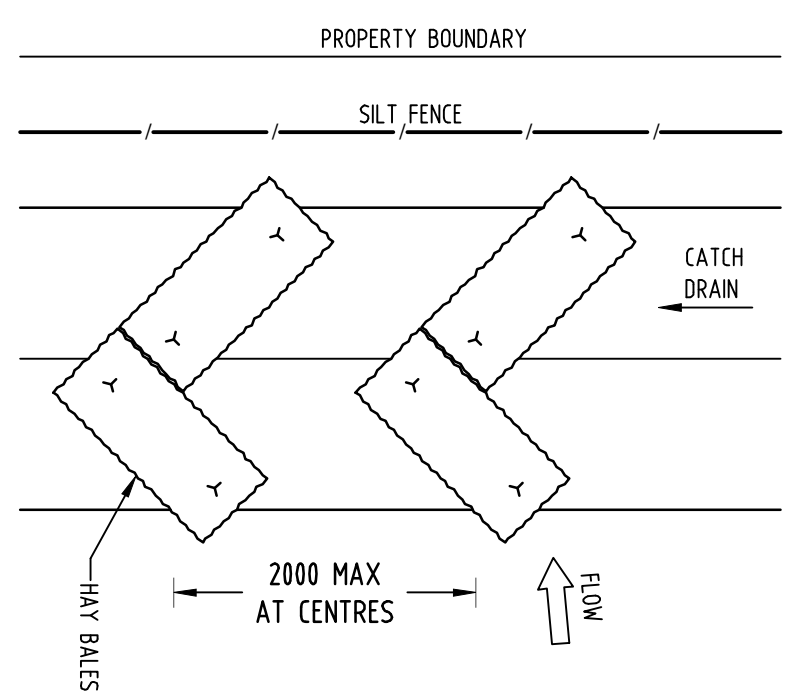
4 DETAIL  
SEDIMENT FENCE  
NOT TO SCALE



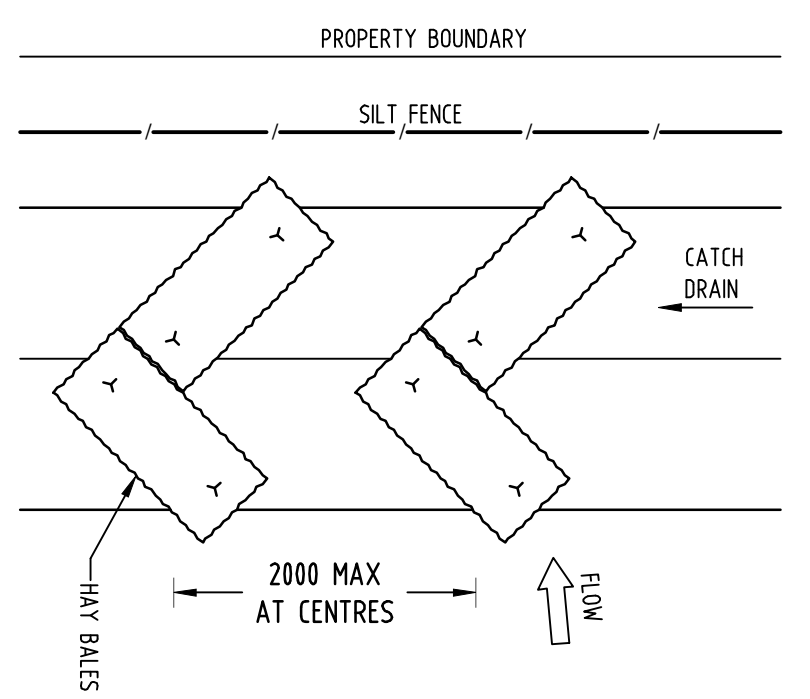
- NOTE:
- FLOCCULATION TO BE USED IF WATER IS NOT CLEAR OR SEDIMENT DEPOSITS THICKER THAN 50mm ON THE SURFACE OF THE SEDIMENT TRAP.
  - FOR BATES & AGENTS SEE APPENDIX E OF NEW SOUTH WALES DEPARTMENT OF HOUSING 'MANAGING URBAN STORMWATER SOILS & CONSTRUCTION'.

5 DETAIL  
FLOCCULATION DETAIL  
NOT TO SCALE

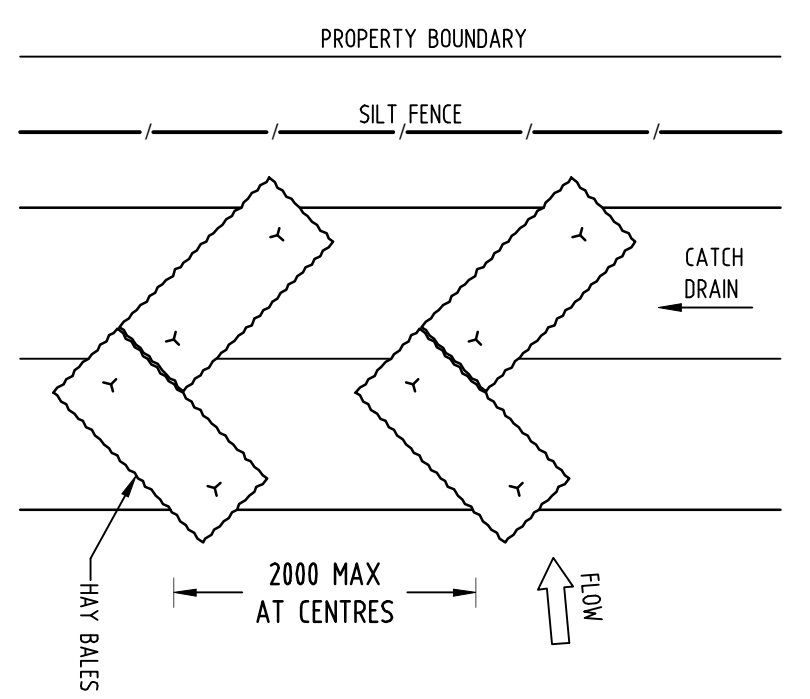
6 DETAIL  
GRAVEL INLET FILTER (SAUSAGE)  
NOT TO SCALE



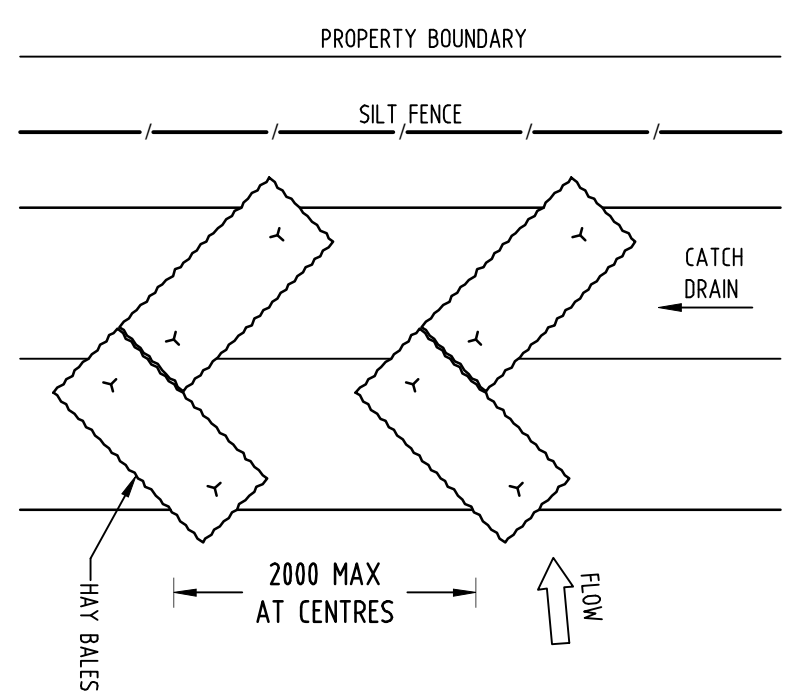
3 DETAIL  
TEMPORARY CATCH DRAIN  
SCALE 1:50



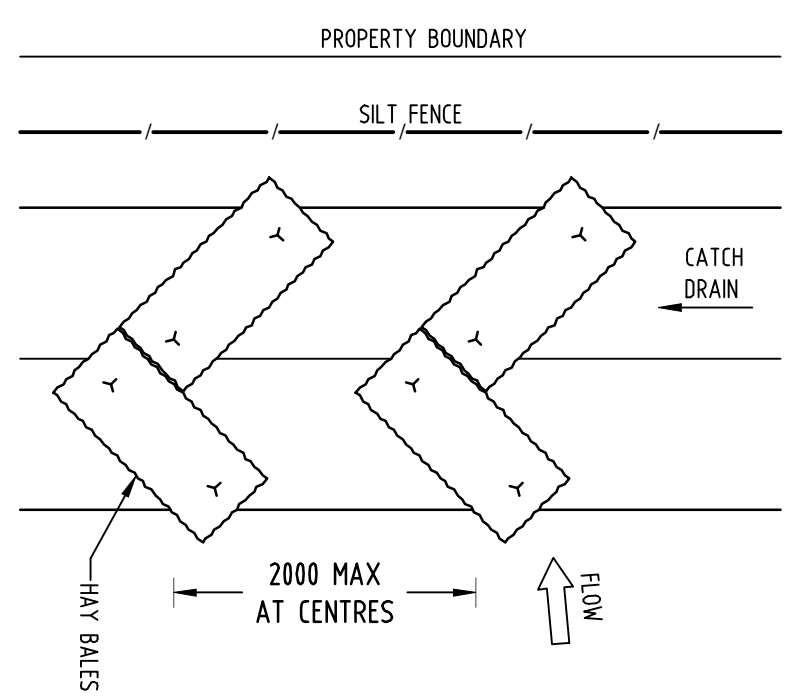
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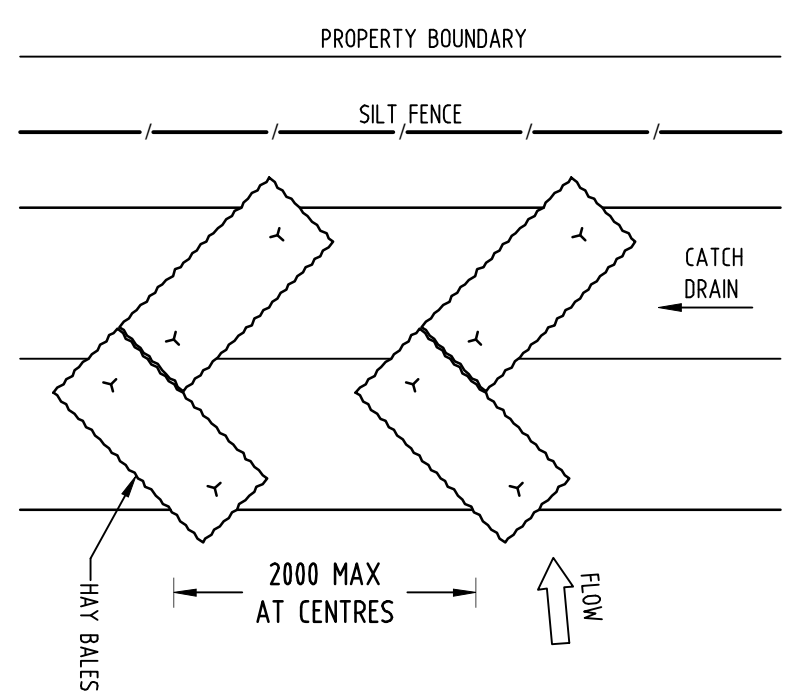
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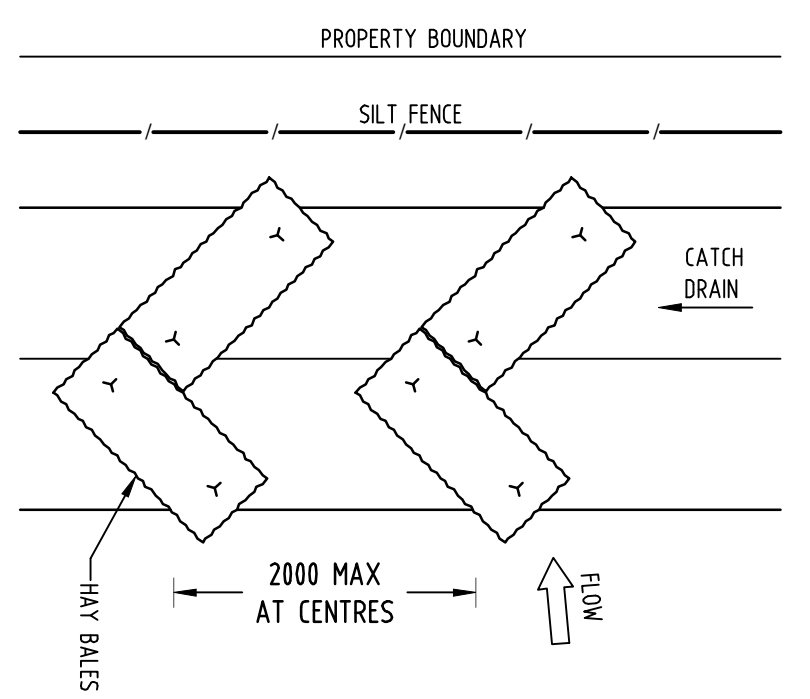
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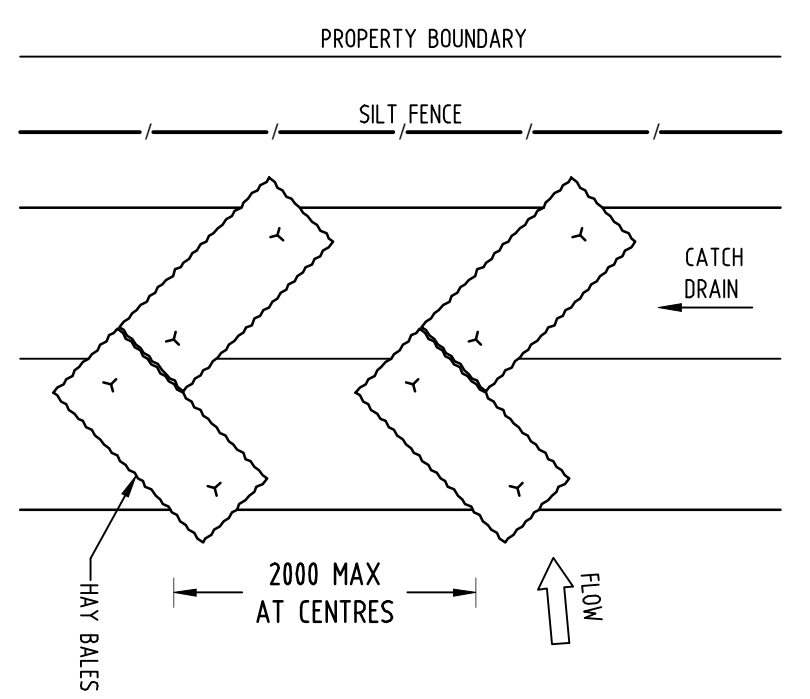
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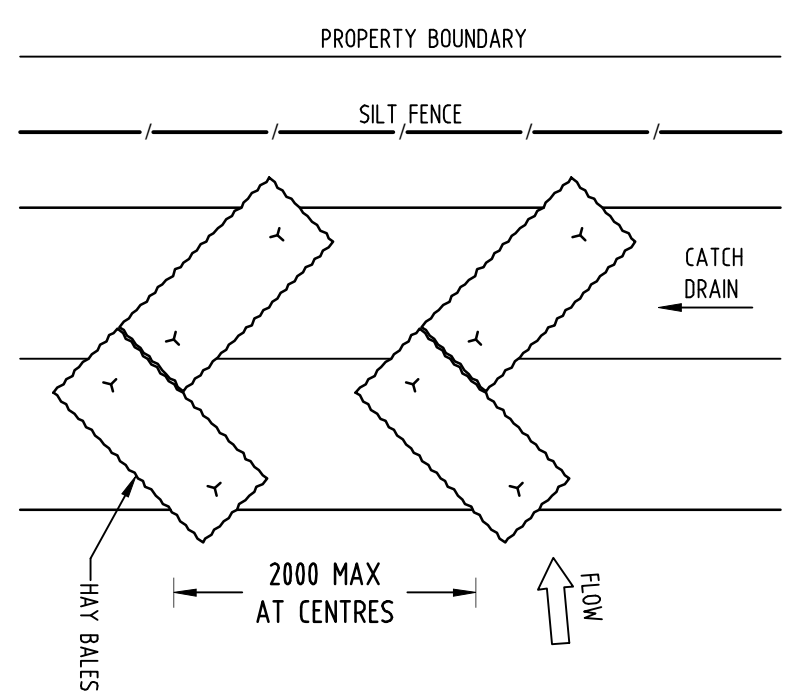
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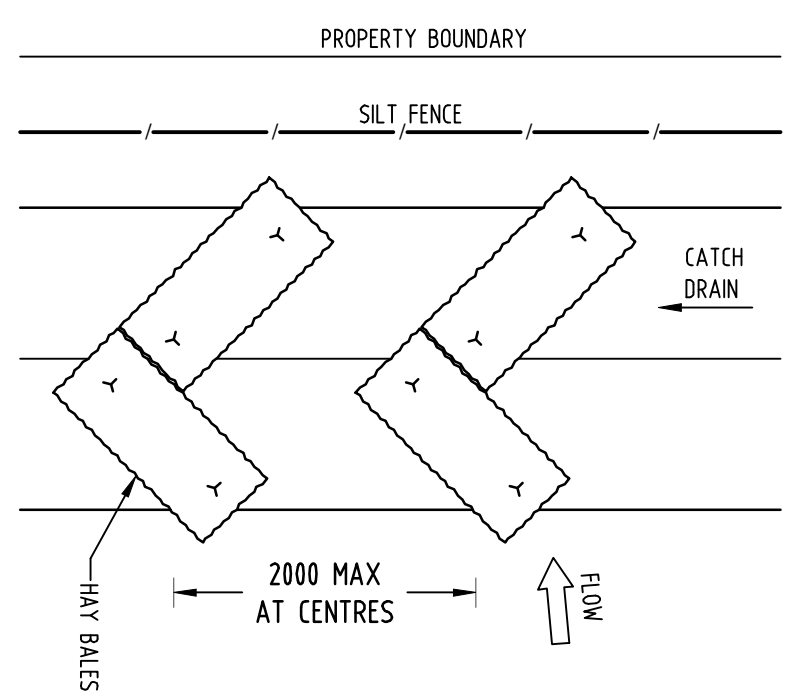
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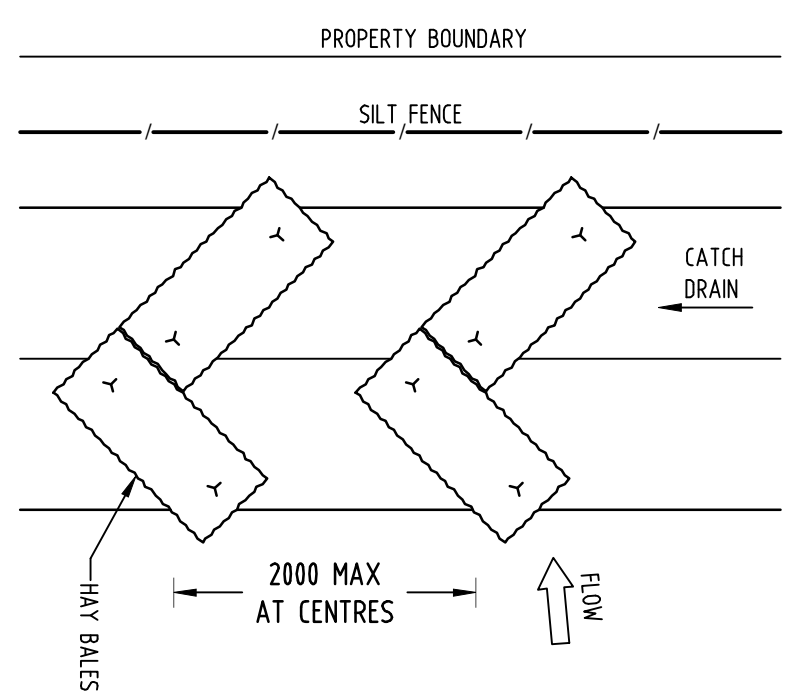
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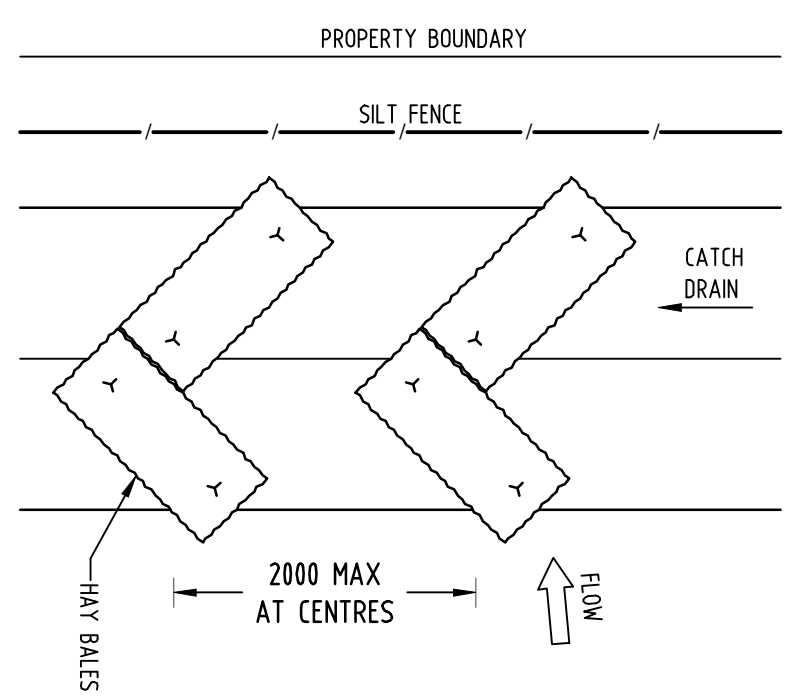
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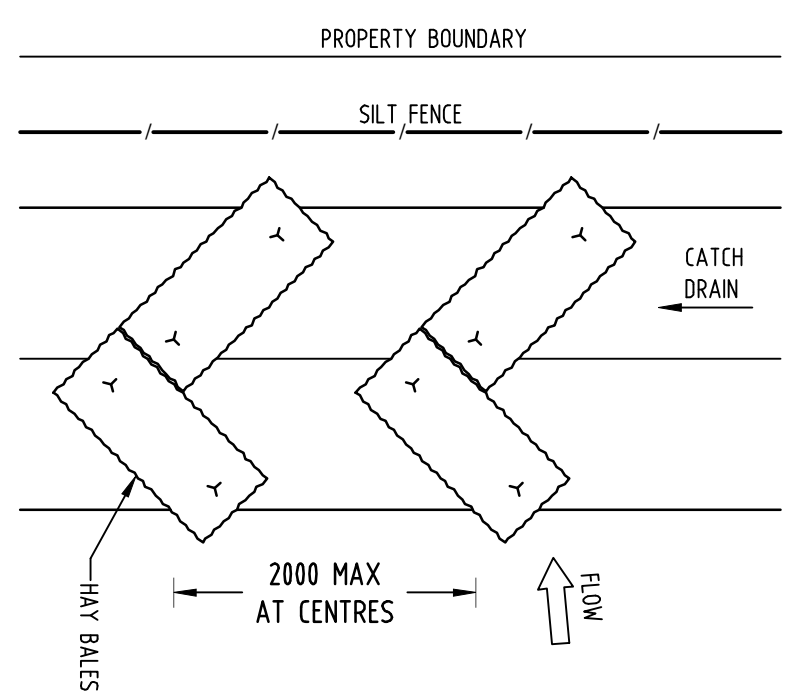
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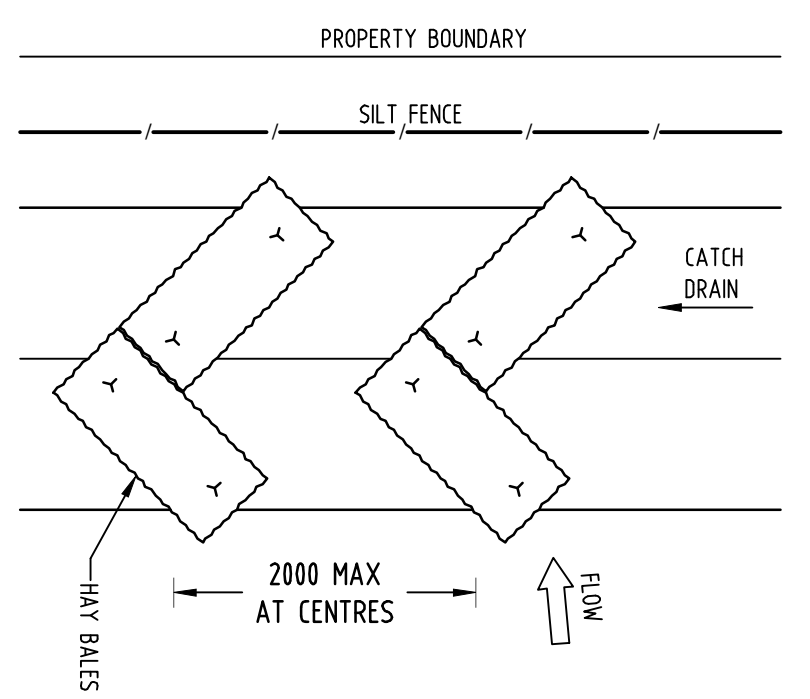
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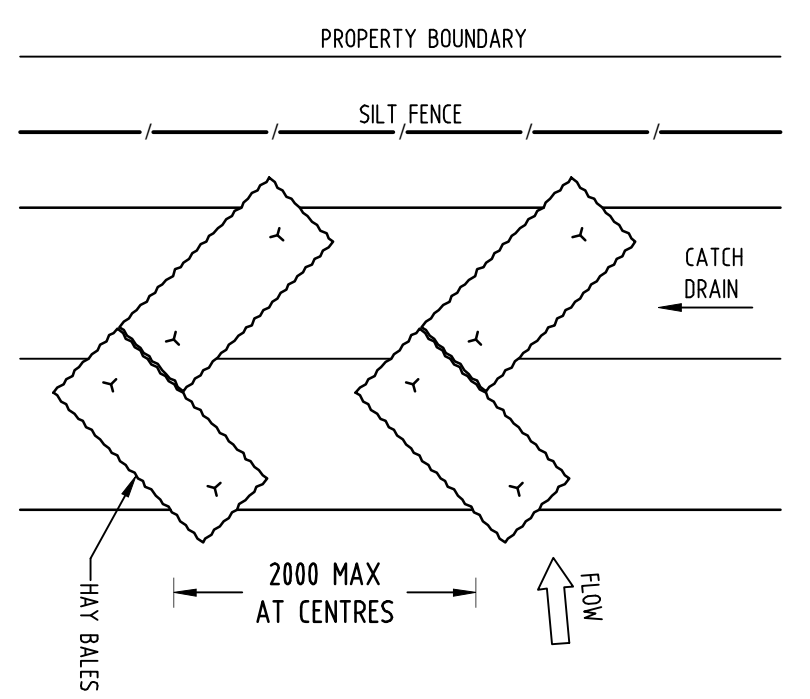
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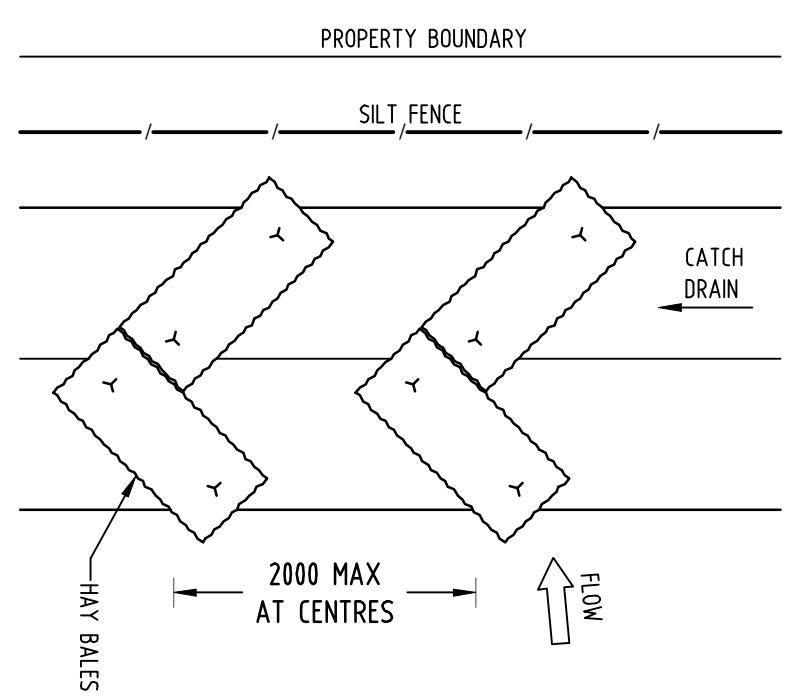
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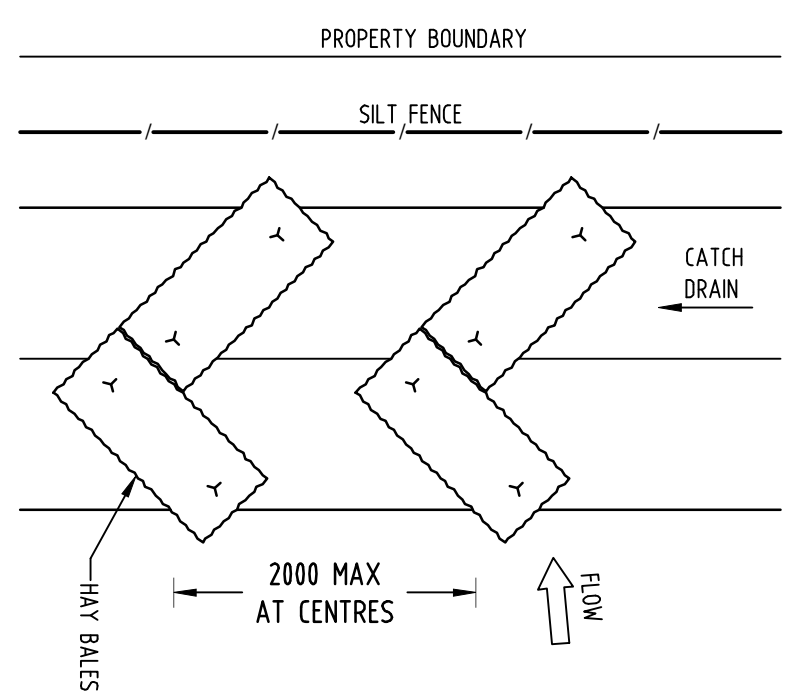
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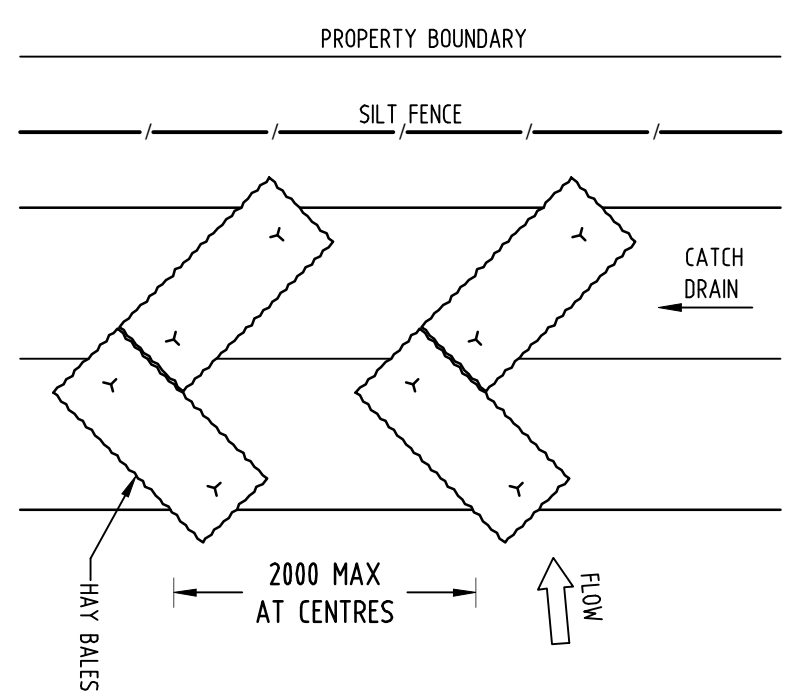
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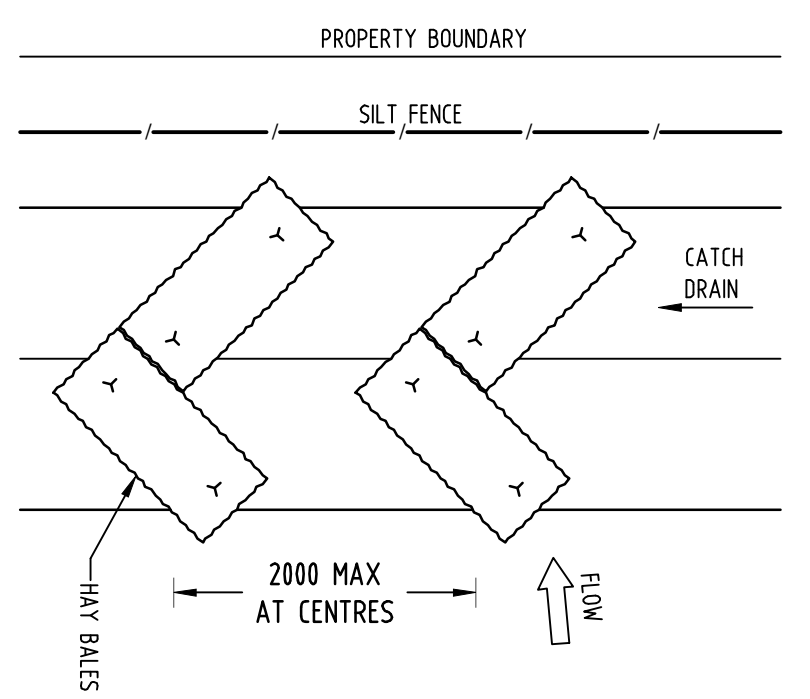
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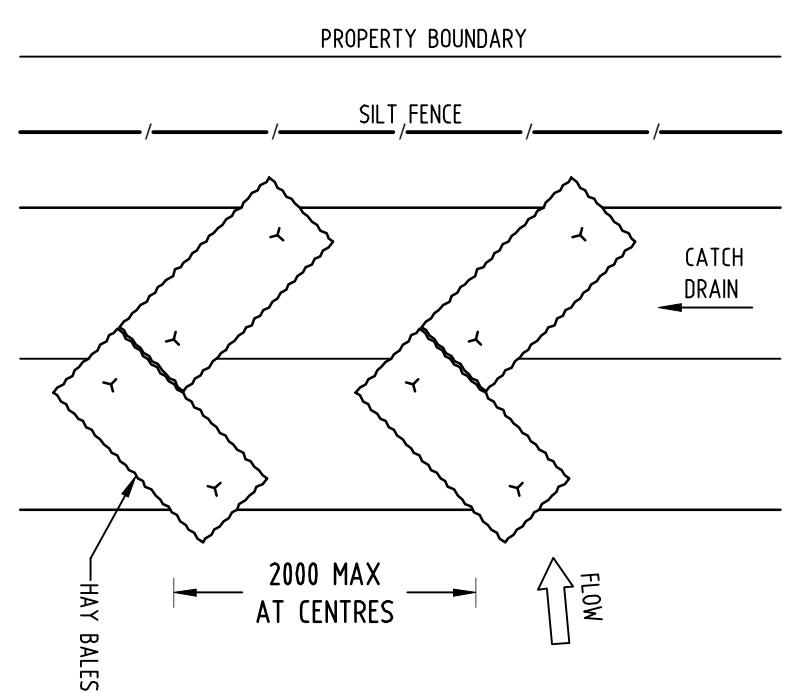
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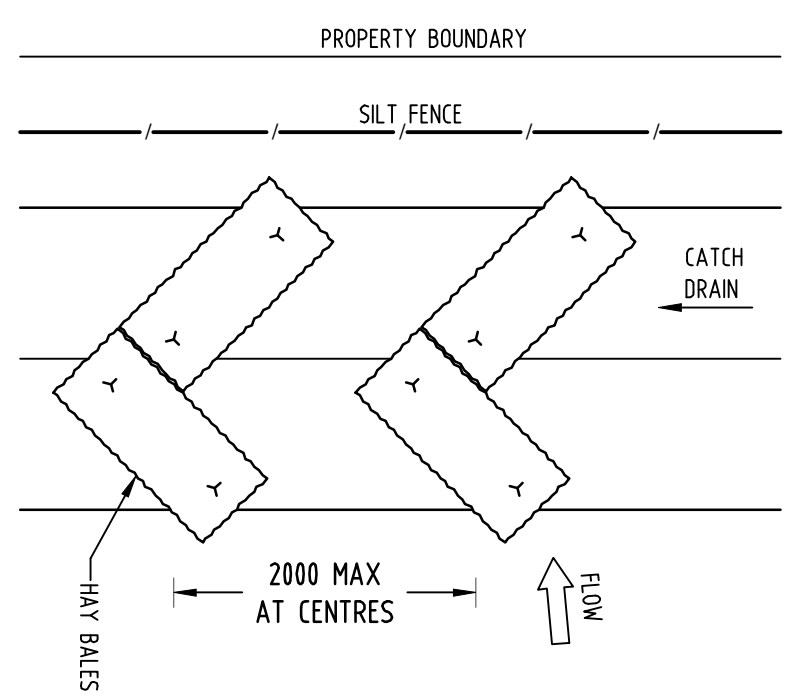
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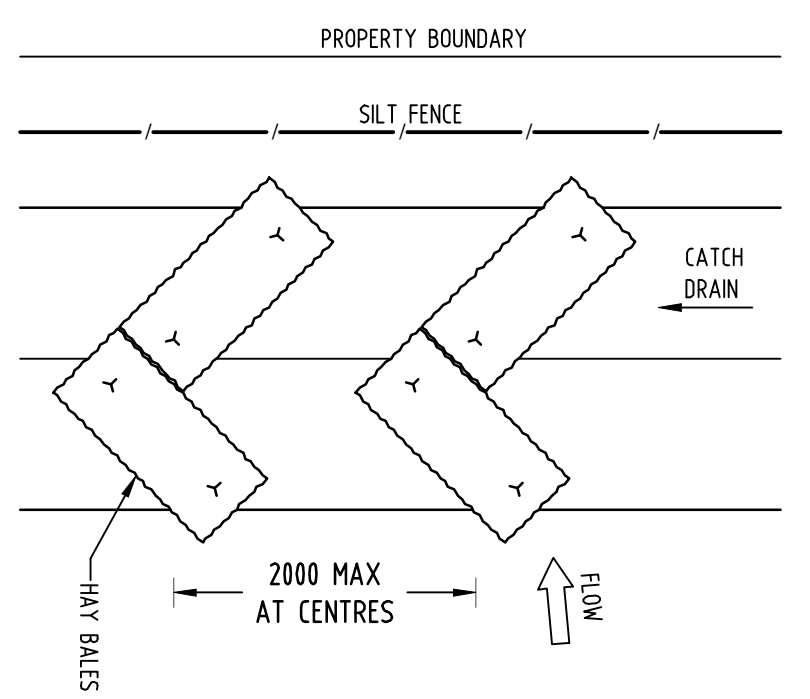
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SCALE 1:50



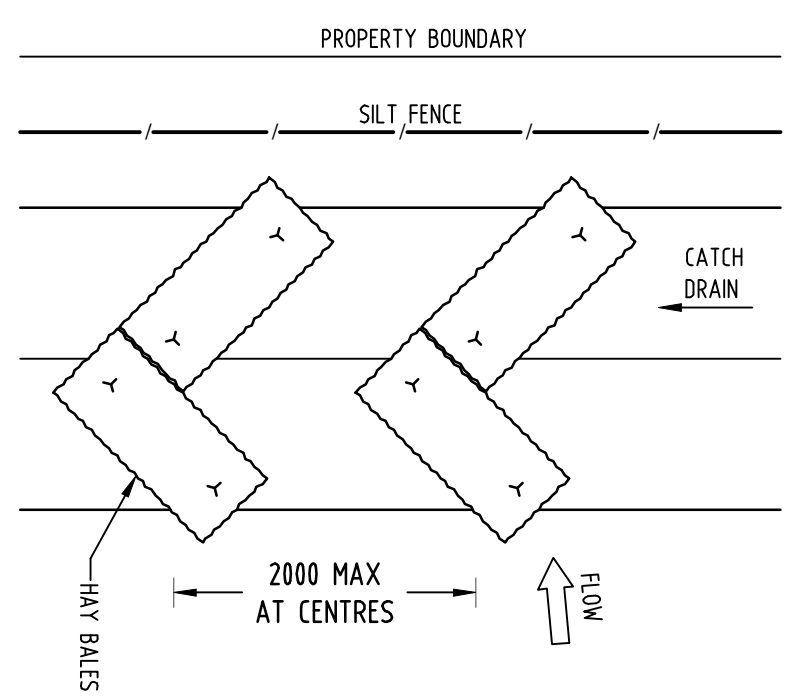
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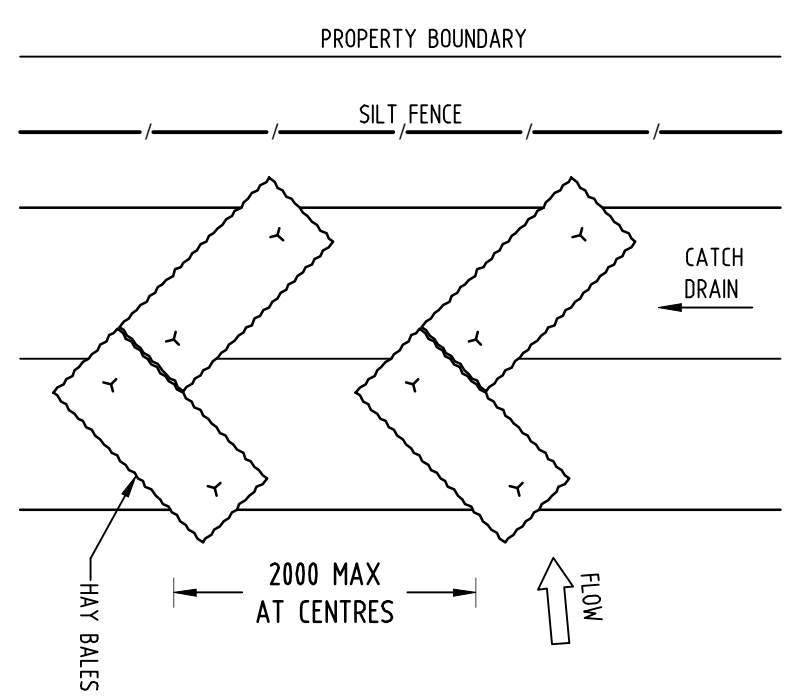
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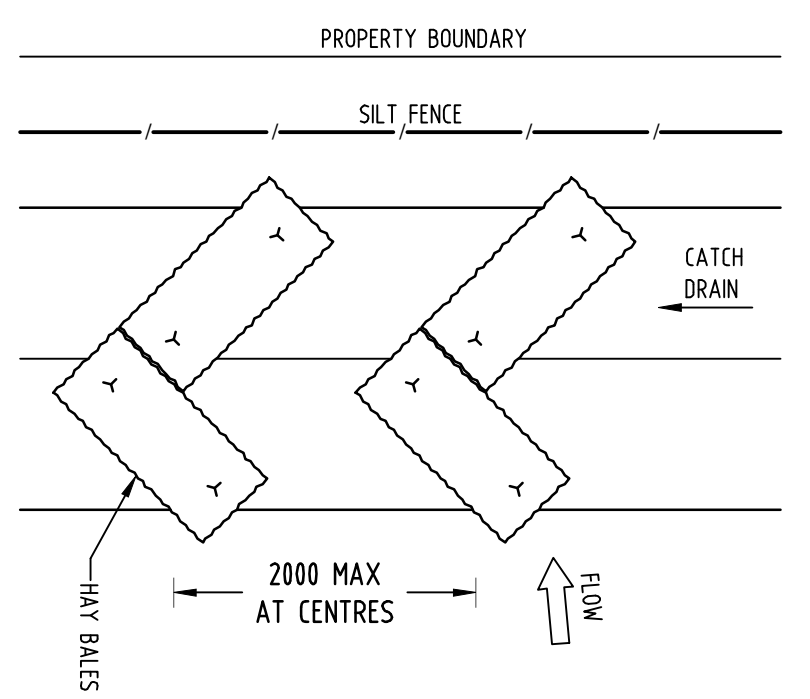
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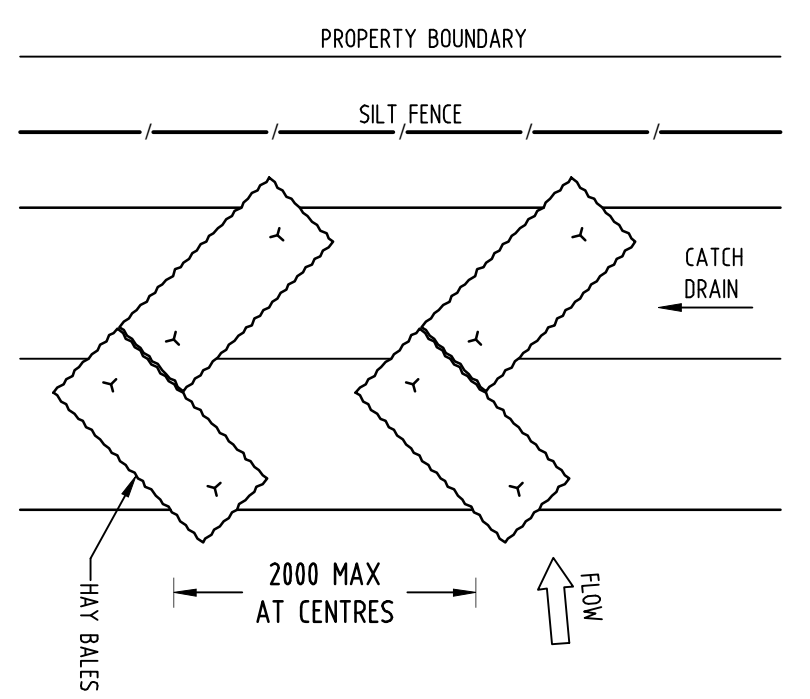
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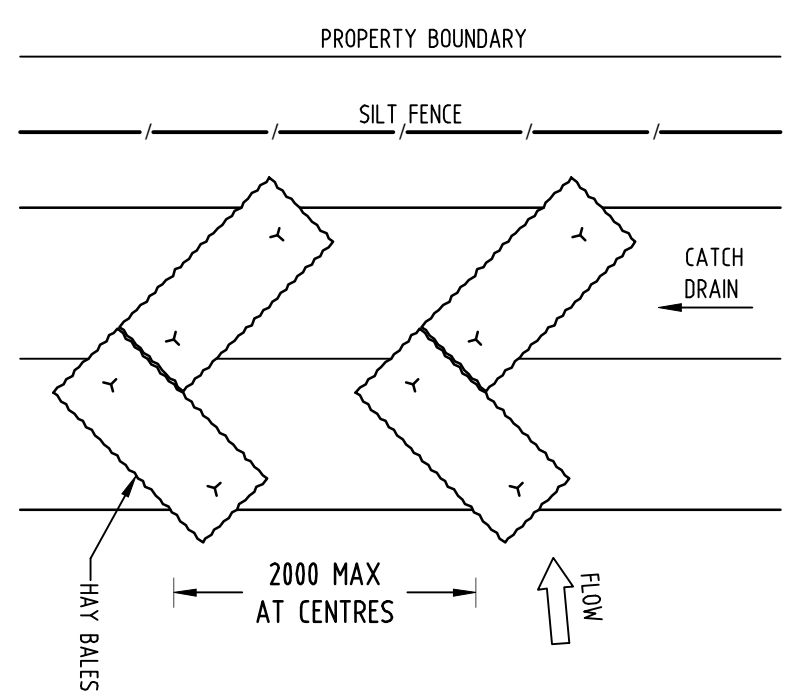
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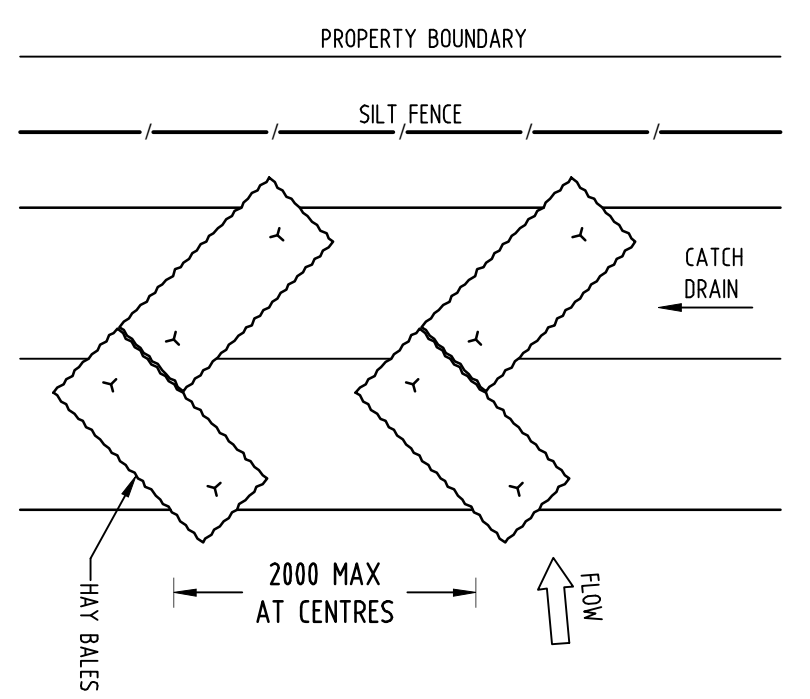
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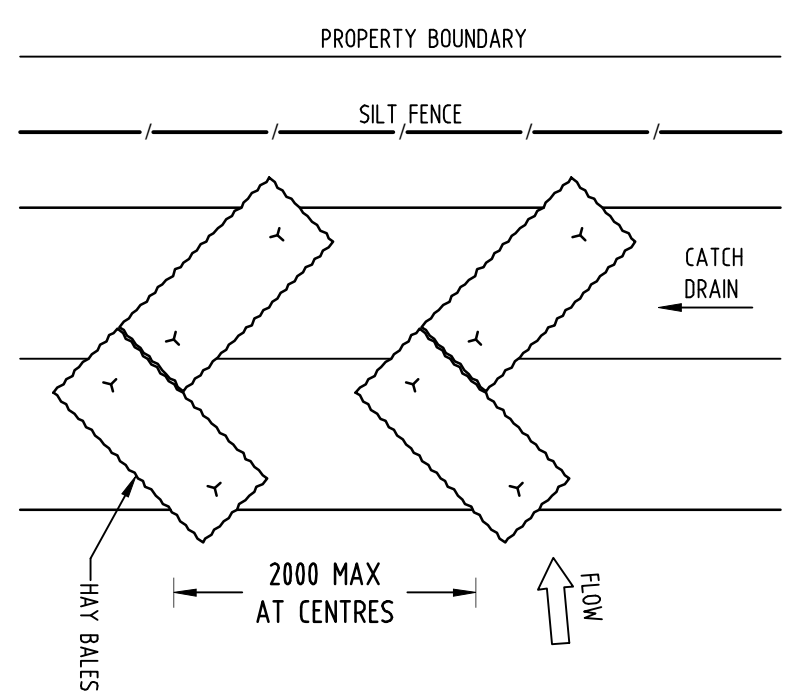
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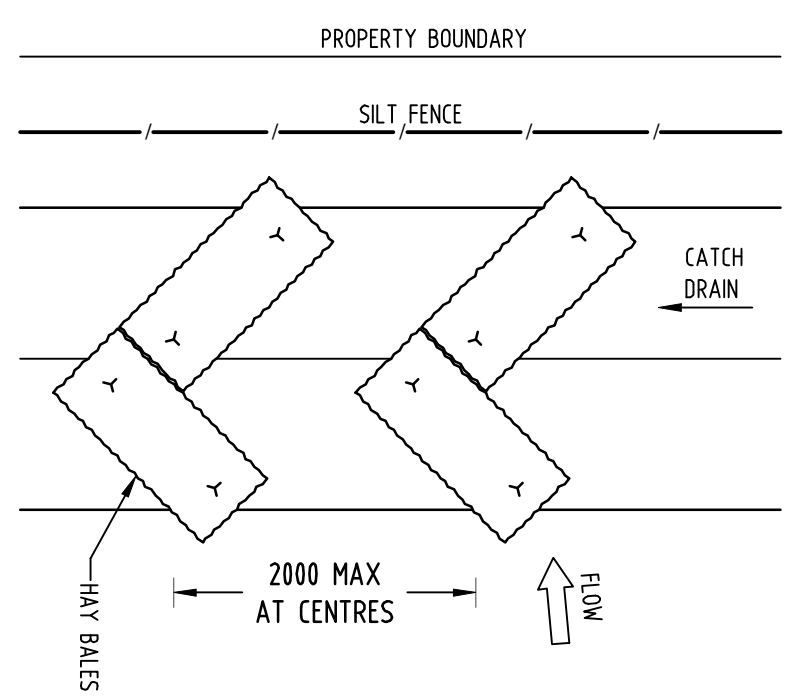
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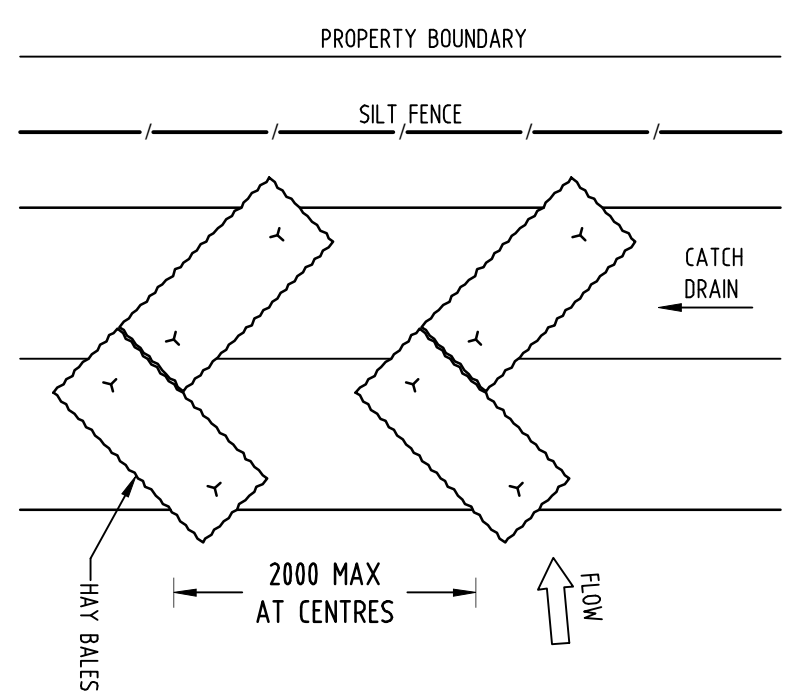
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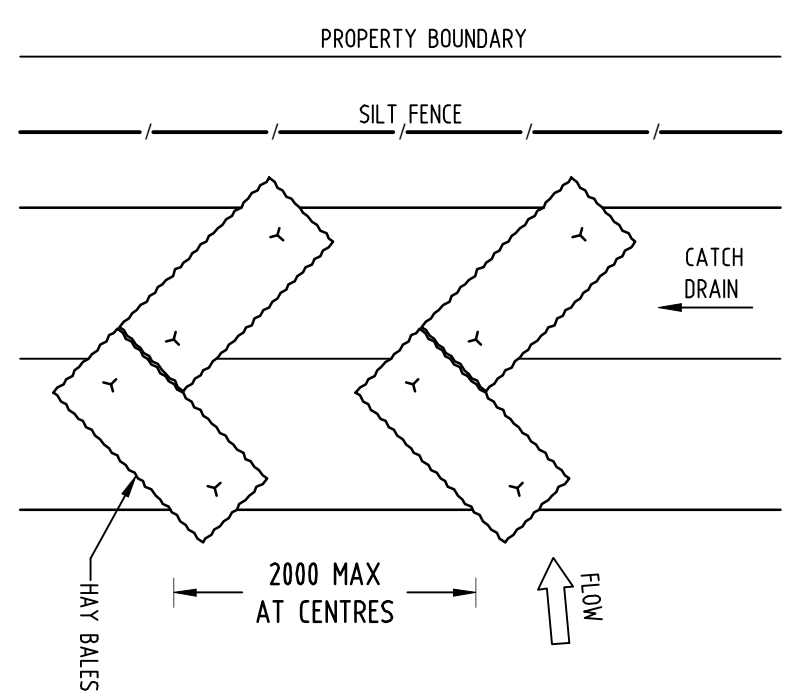
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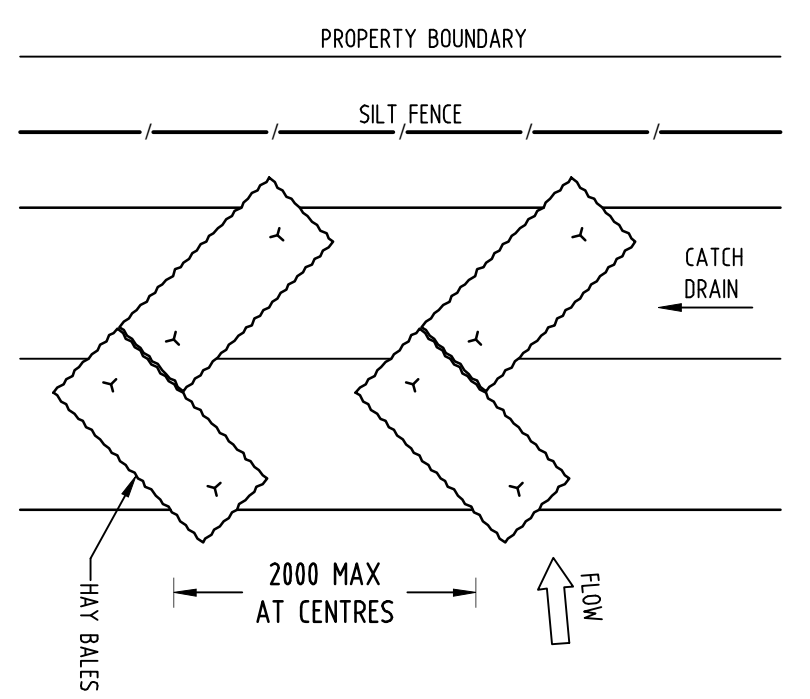
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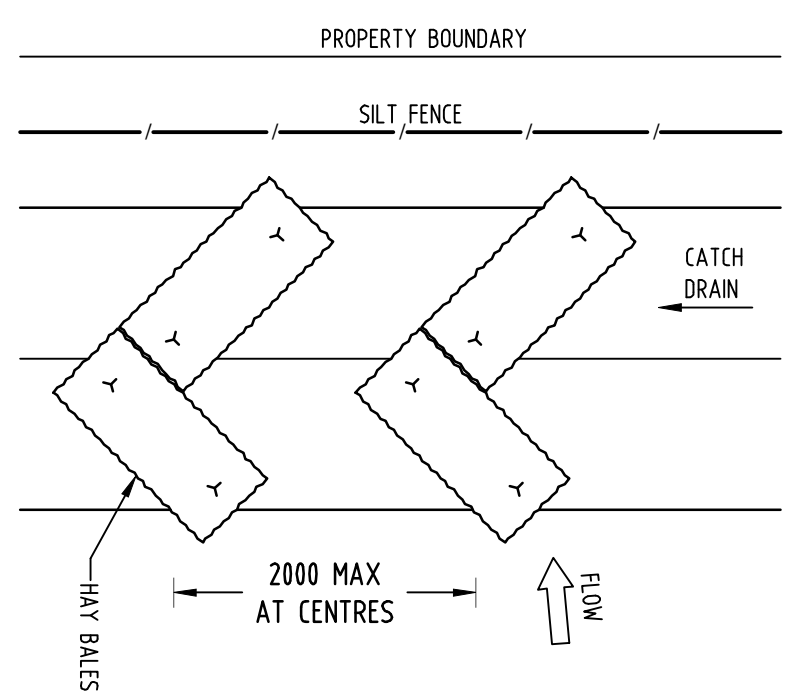
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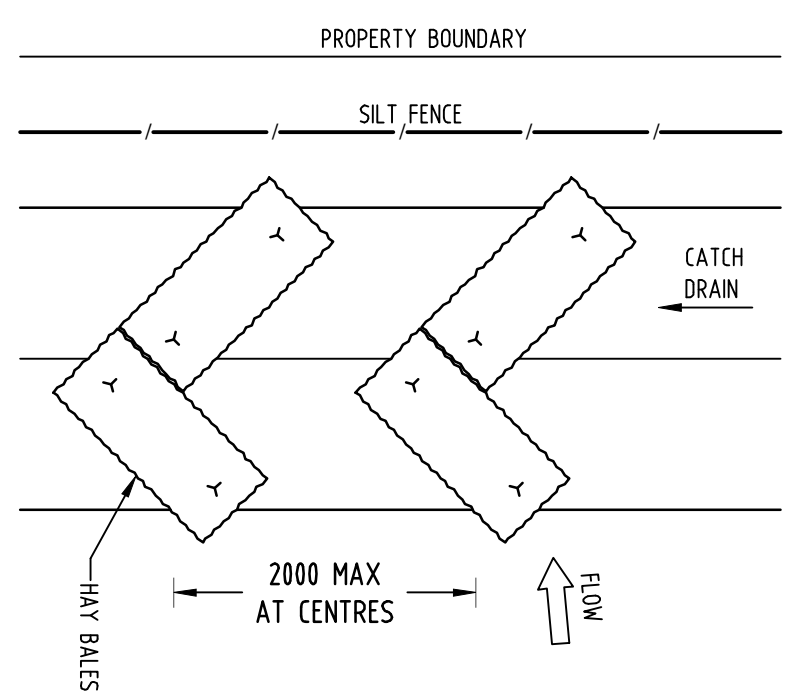
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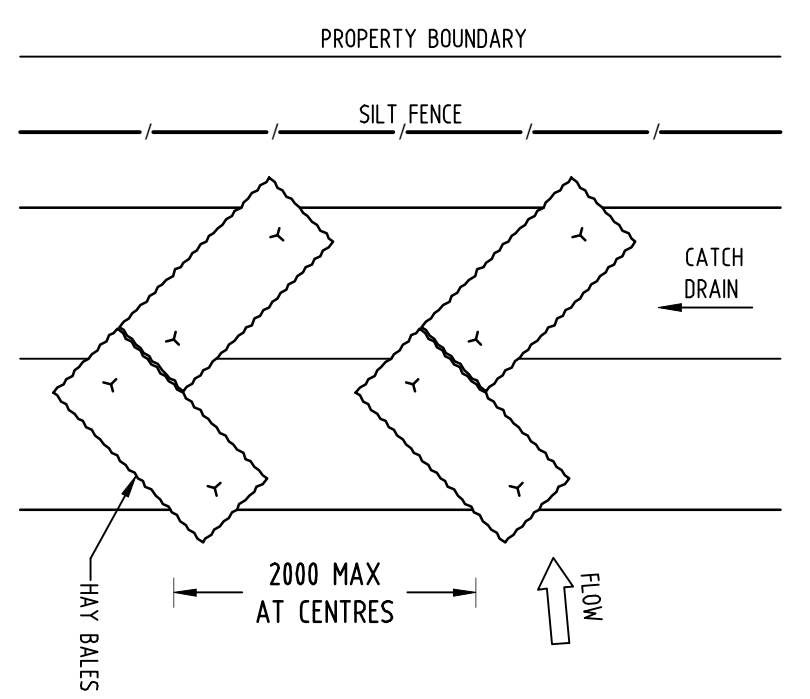
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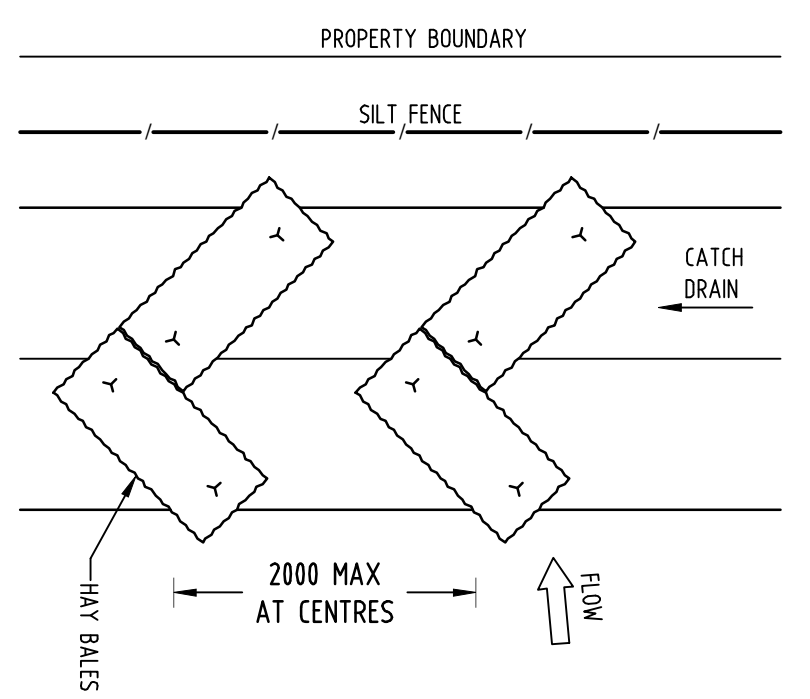
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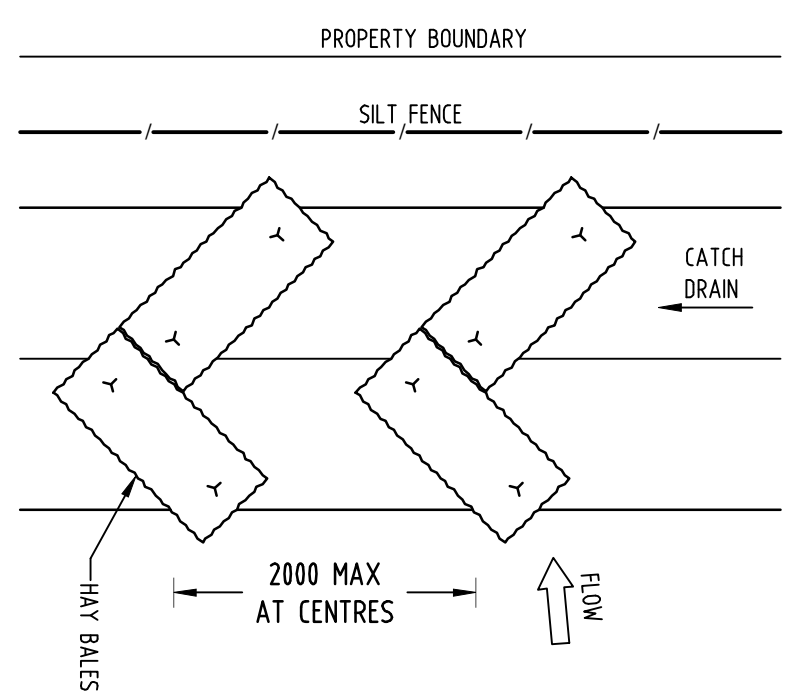
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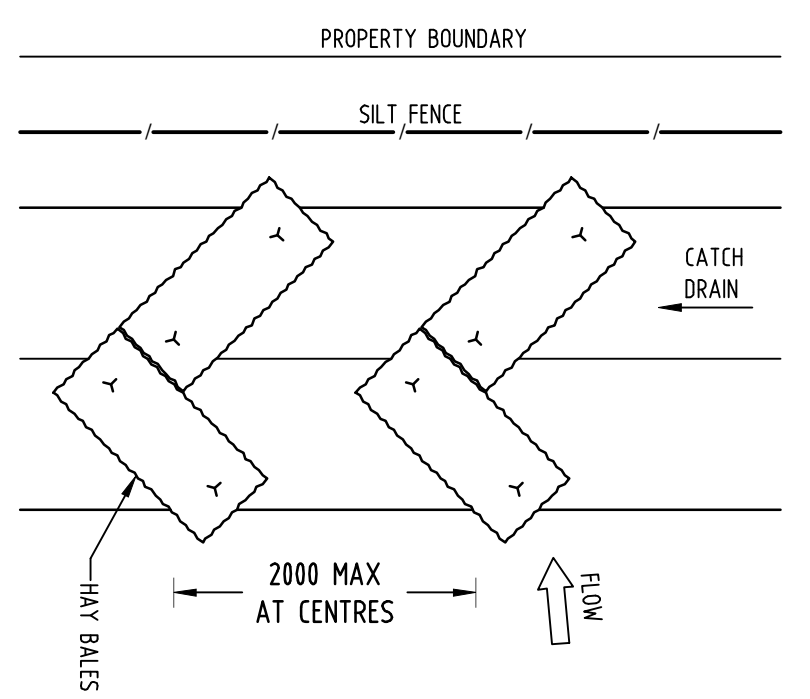
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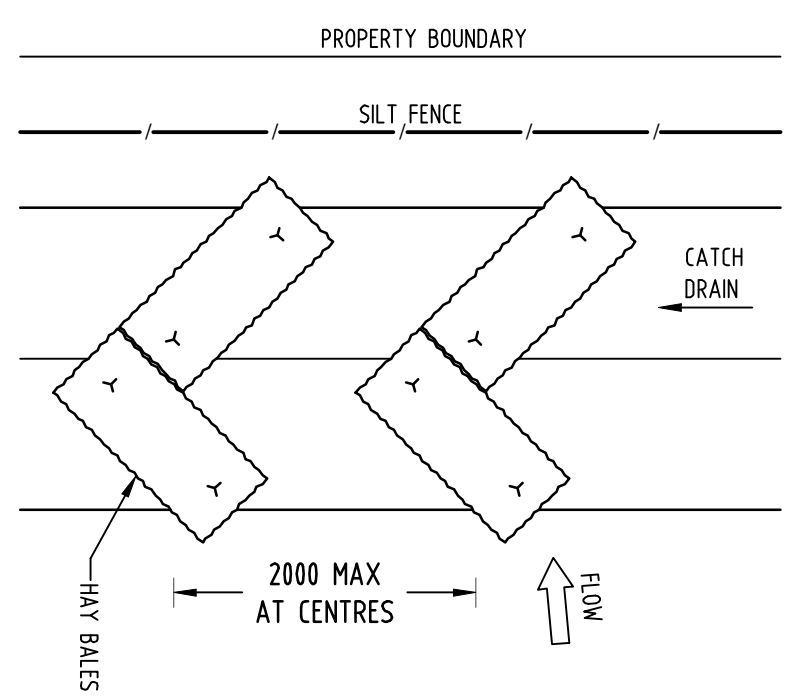
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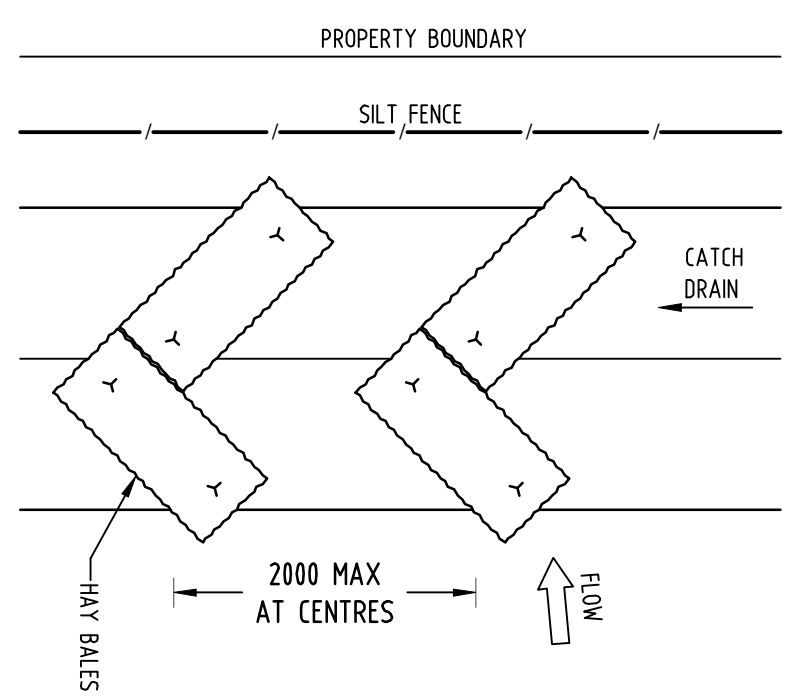
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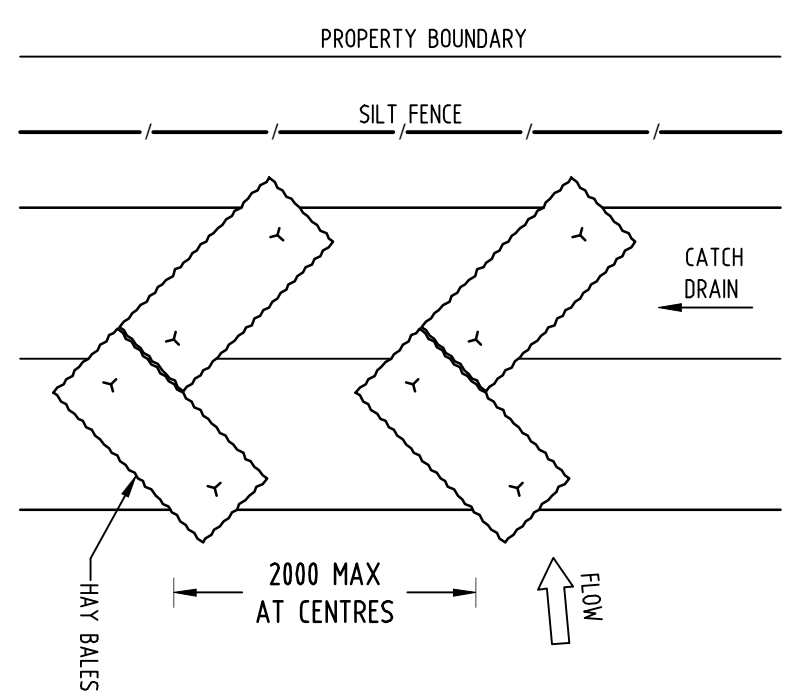
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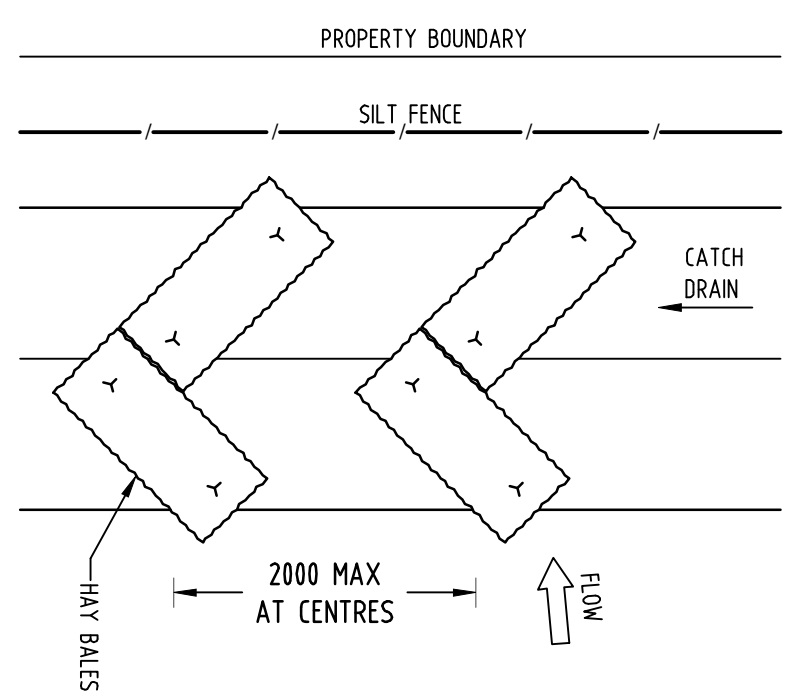
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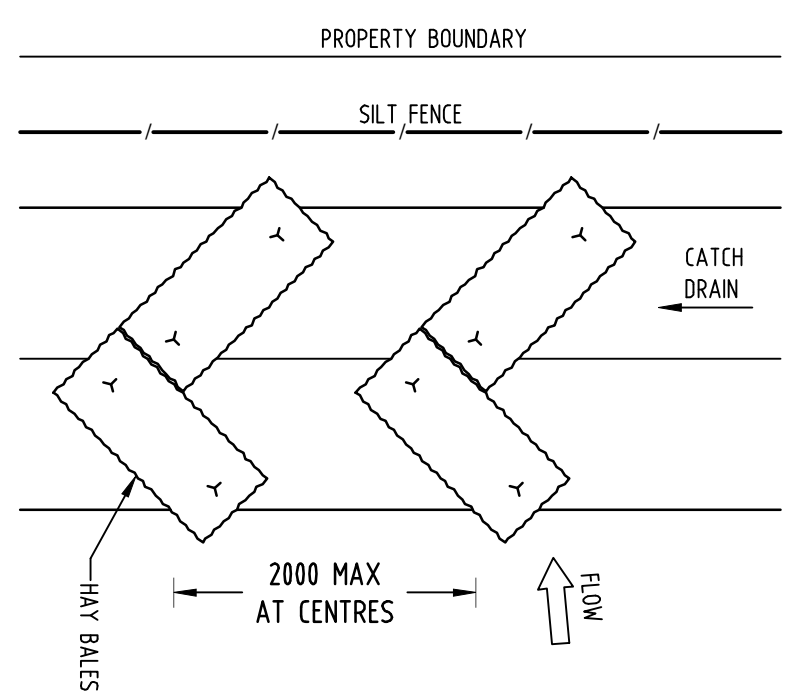
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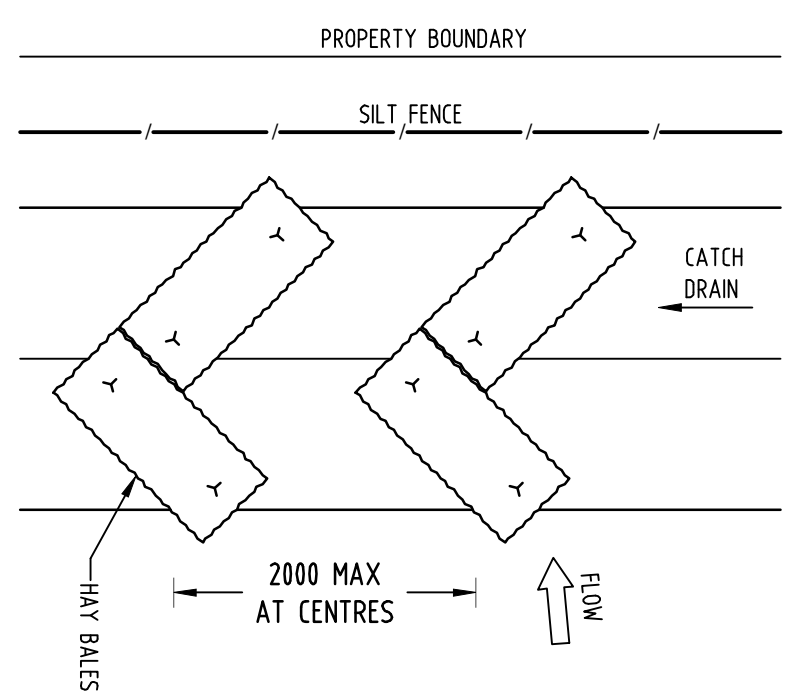
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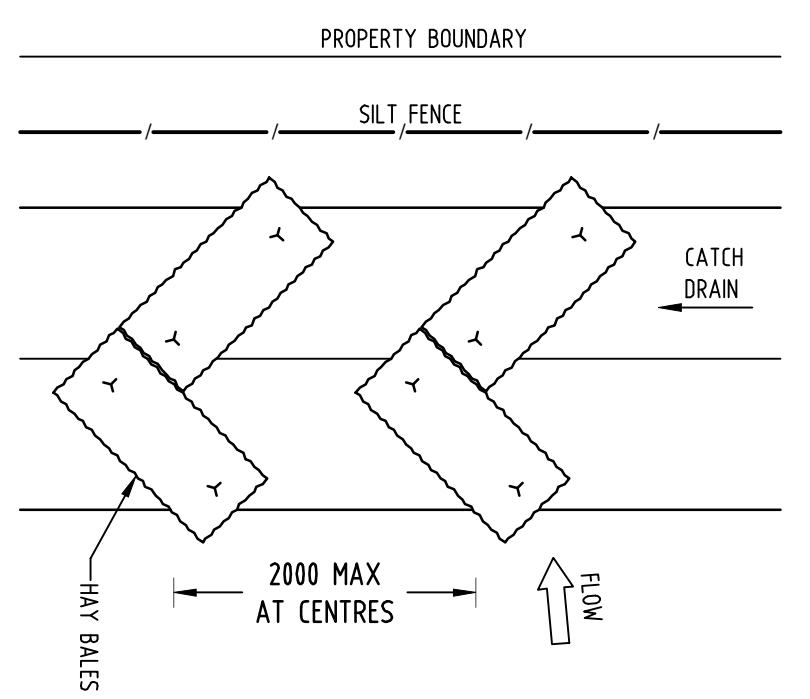
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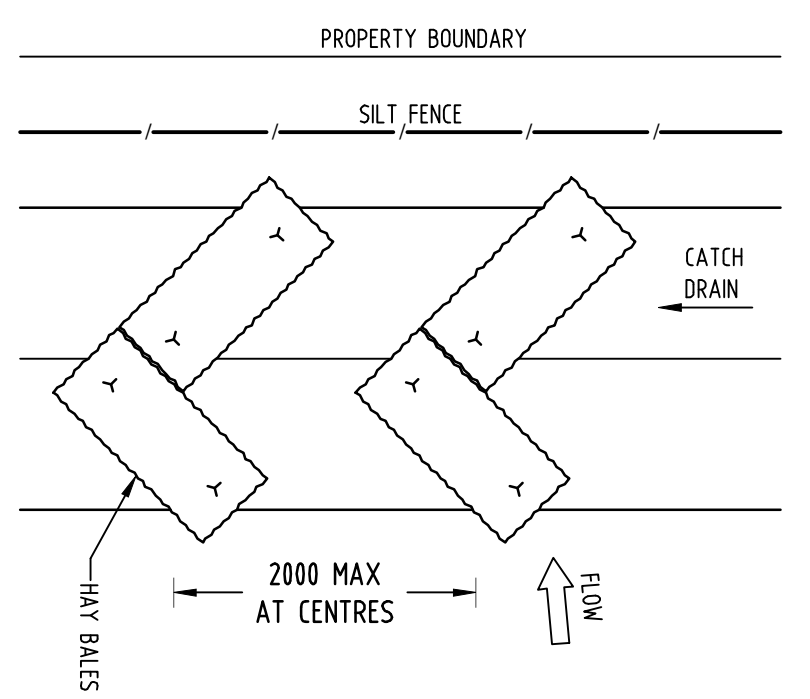
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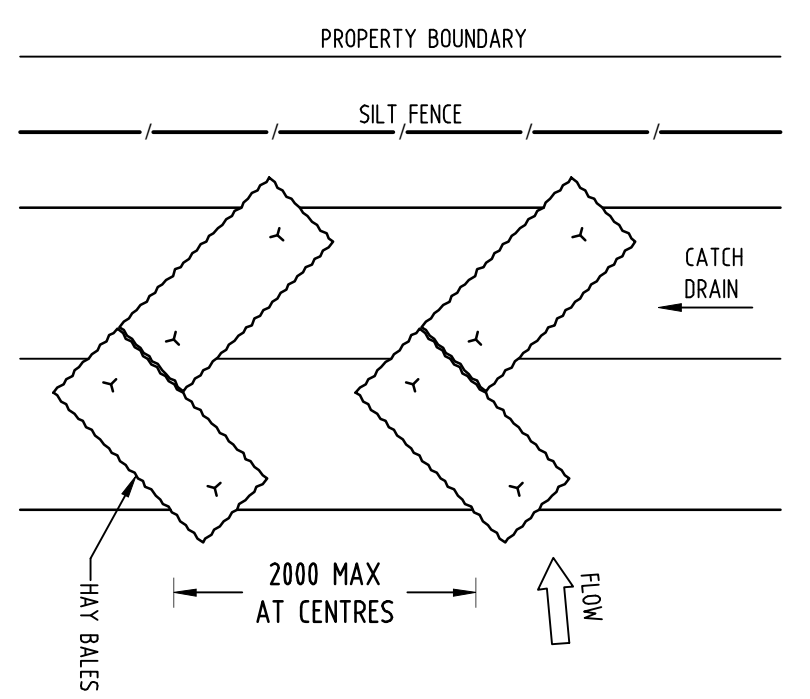
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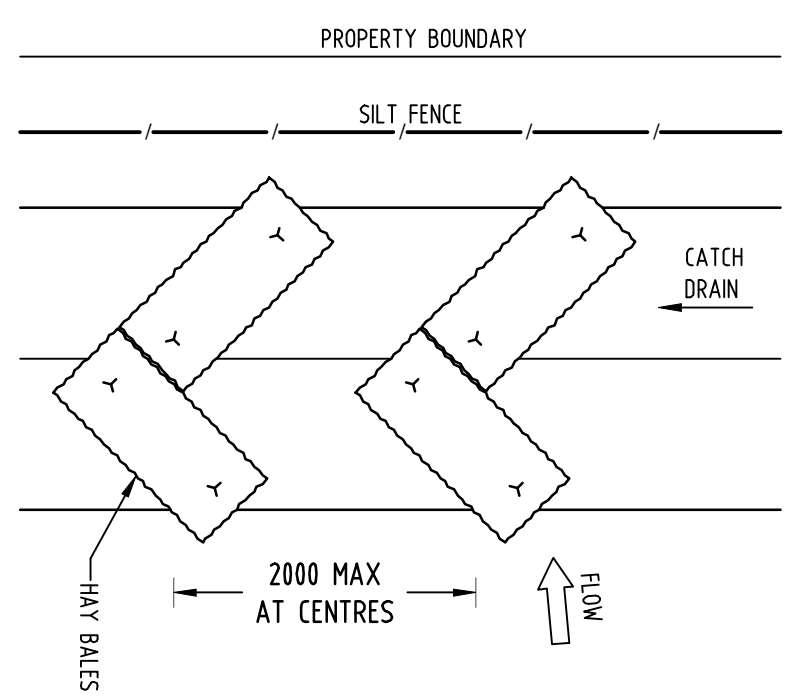
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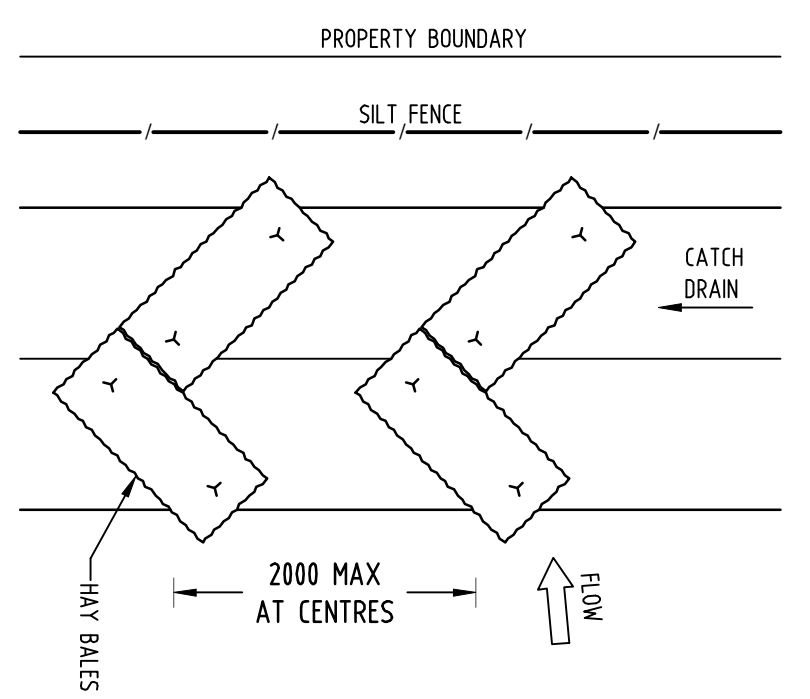
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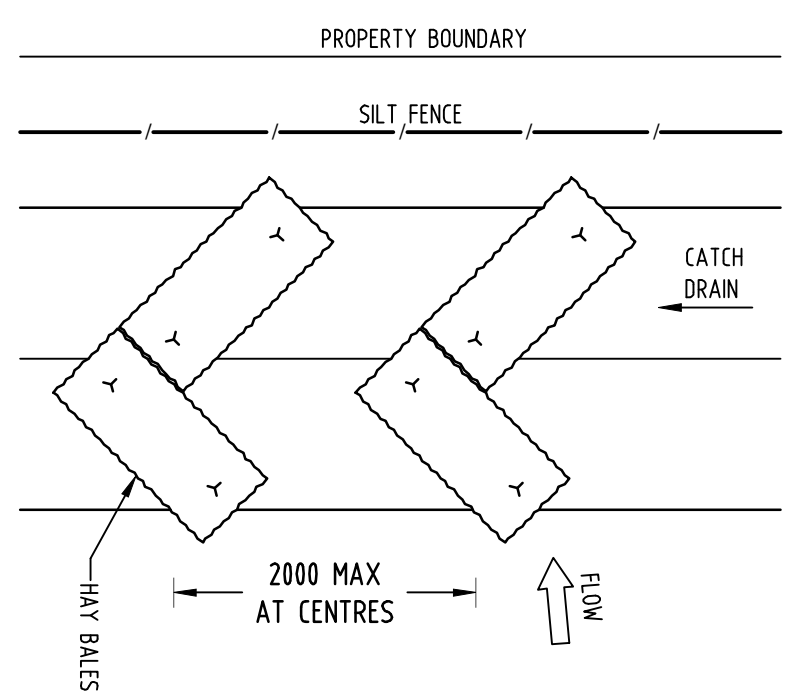
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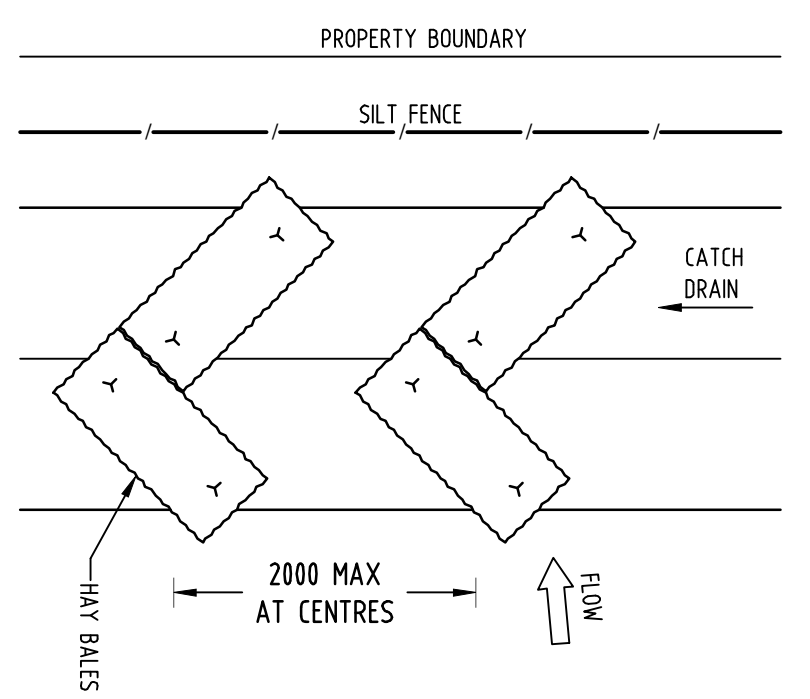
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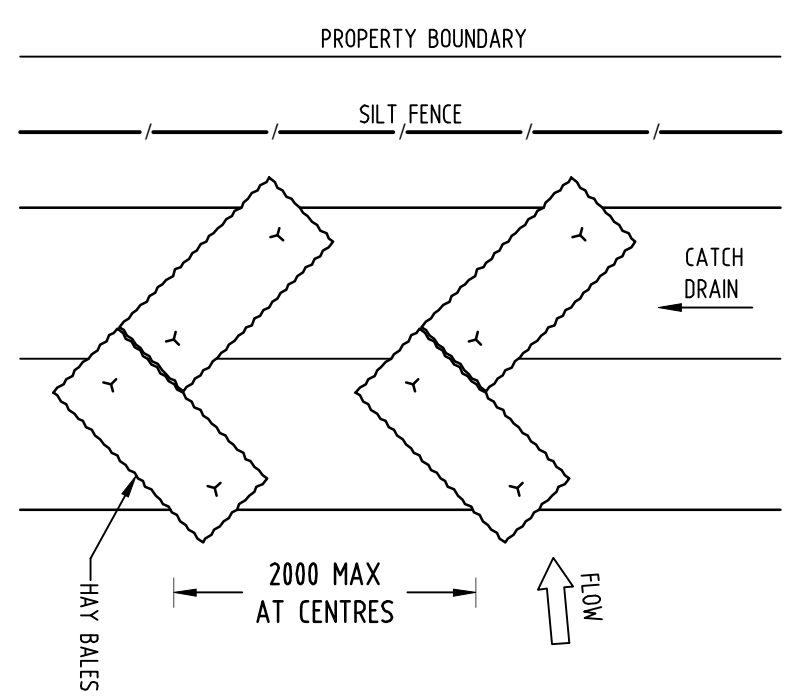
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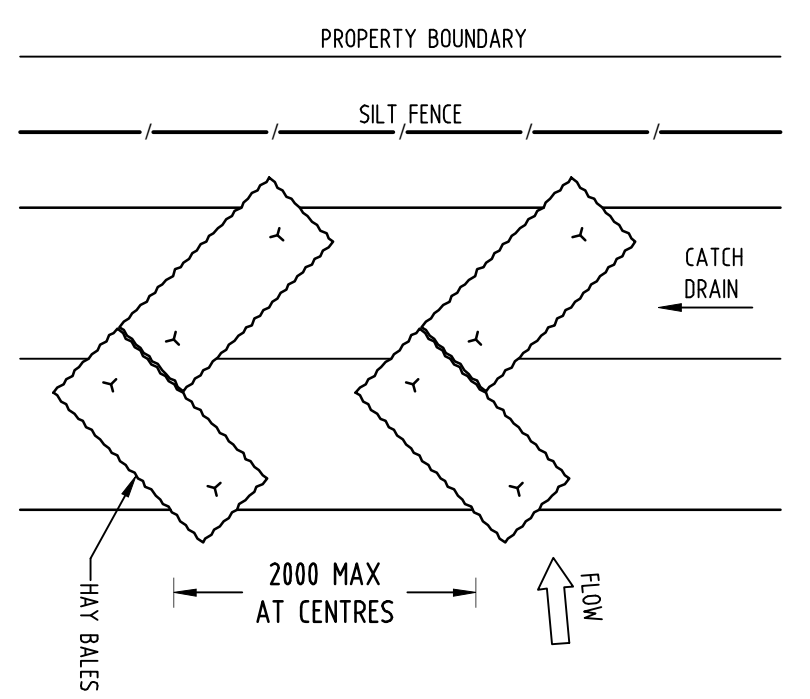
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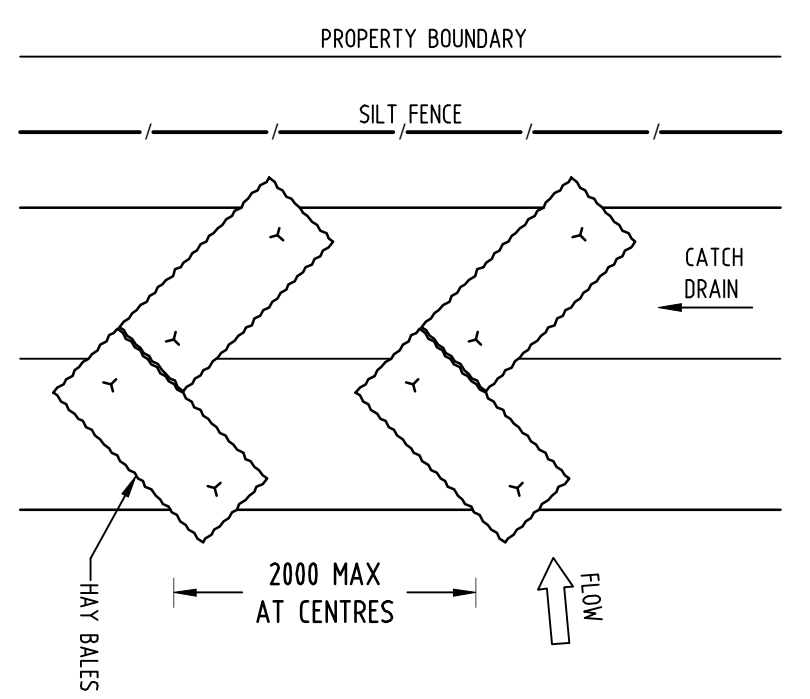
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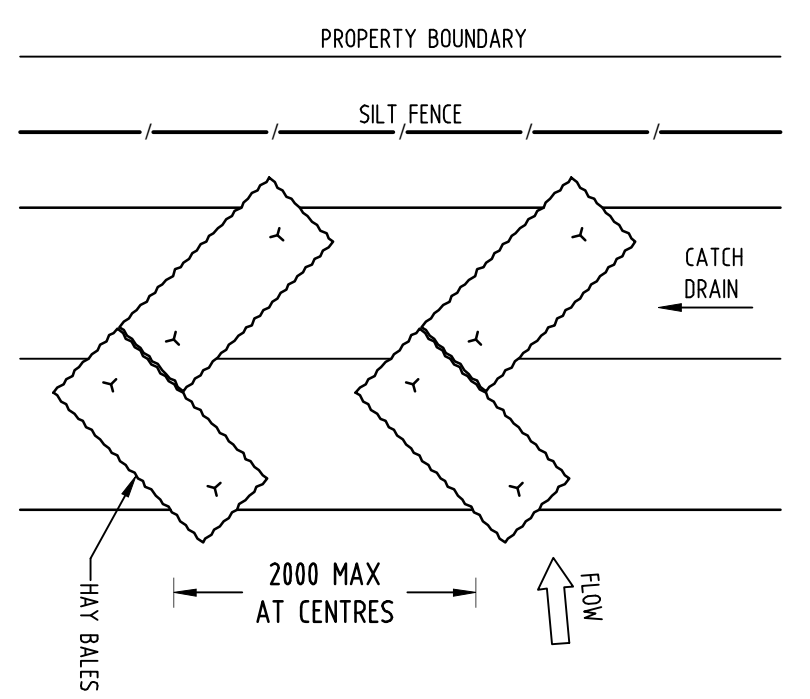
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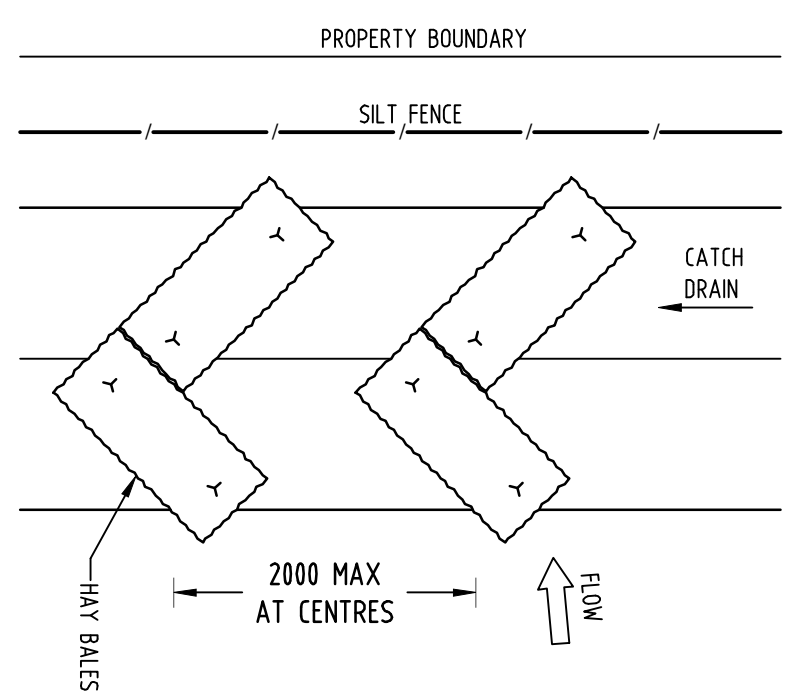
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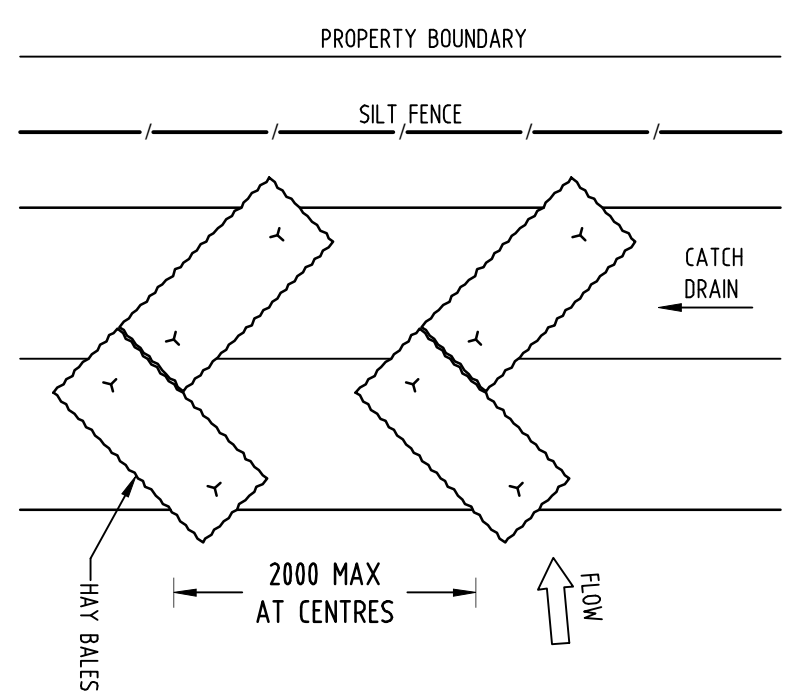
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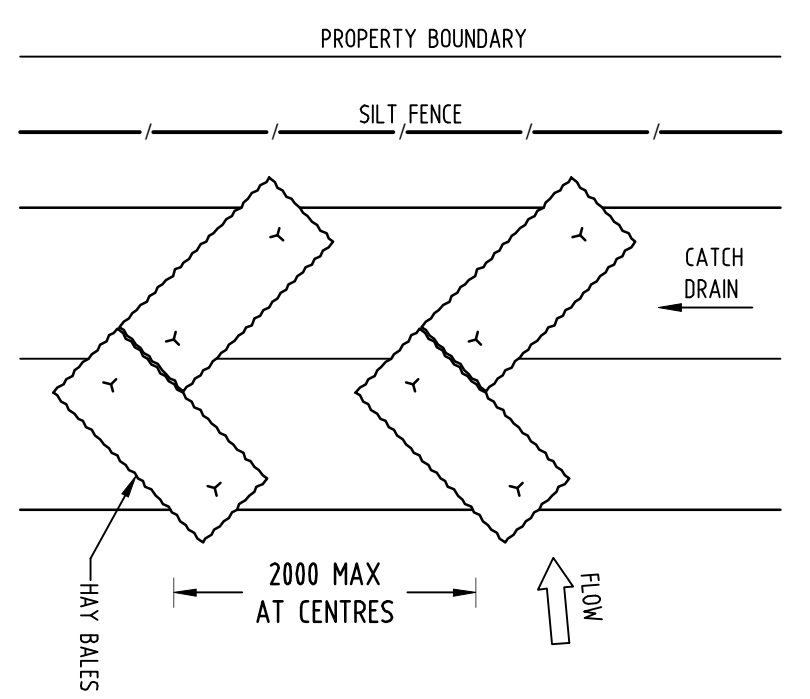
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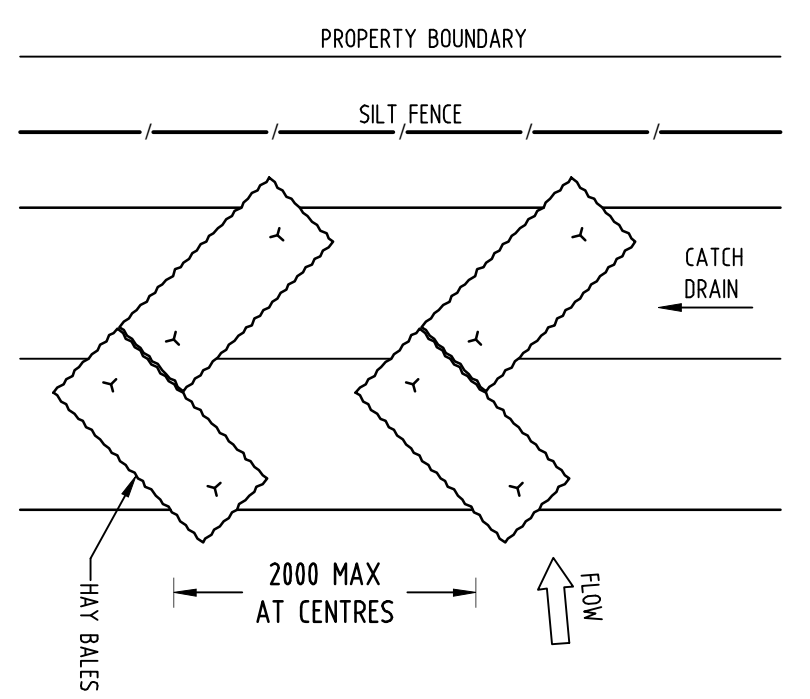
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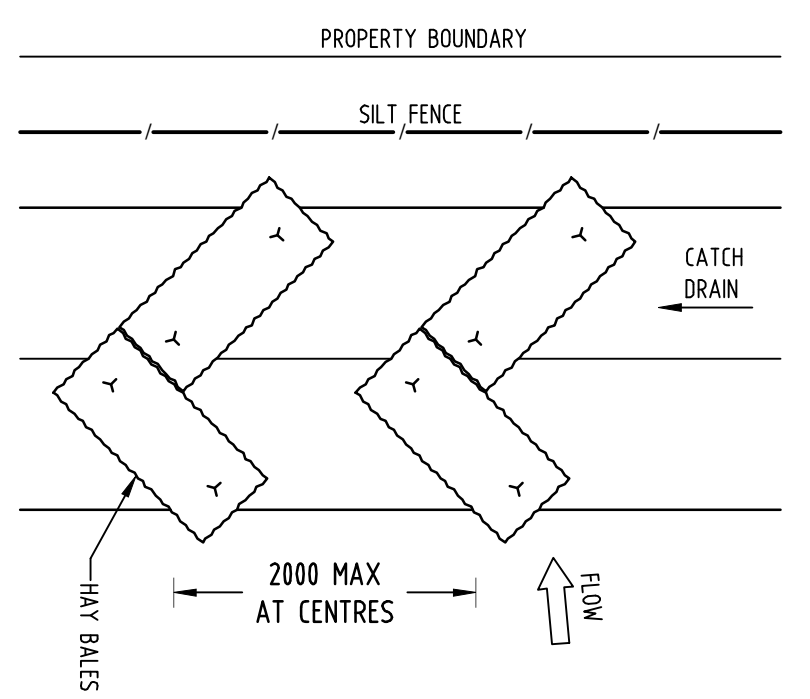
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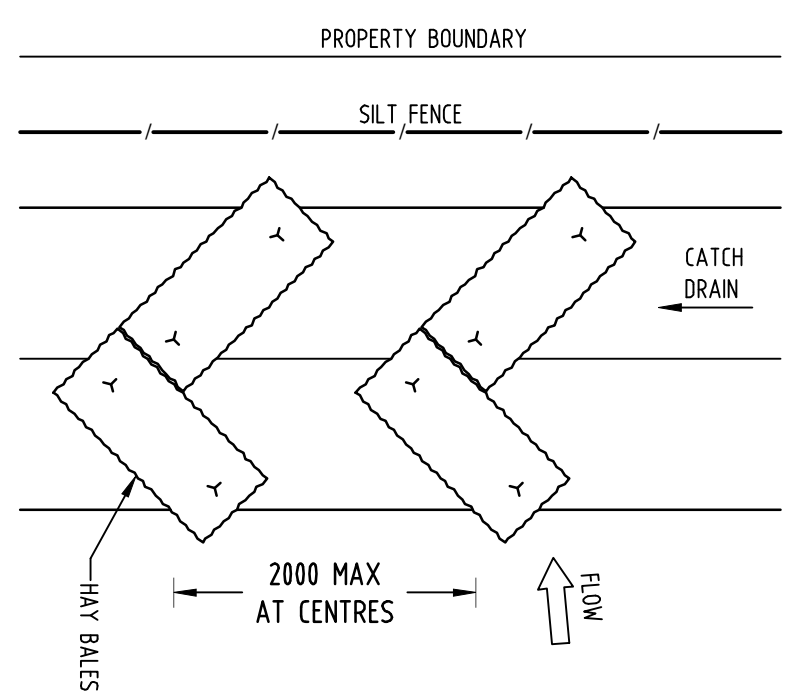
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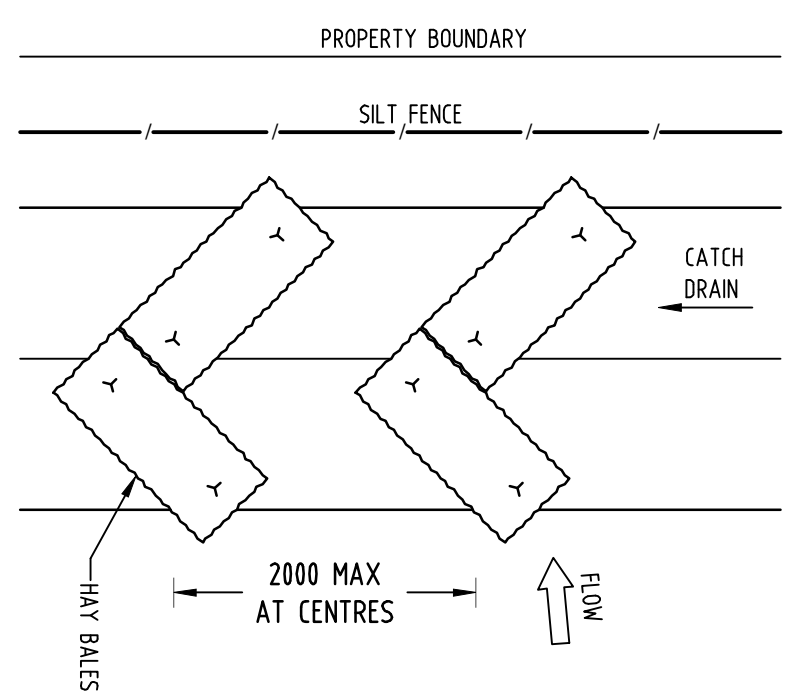
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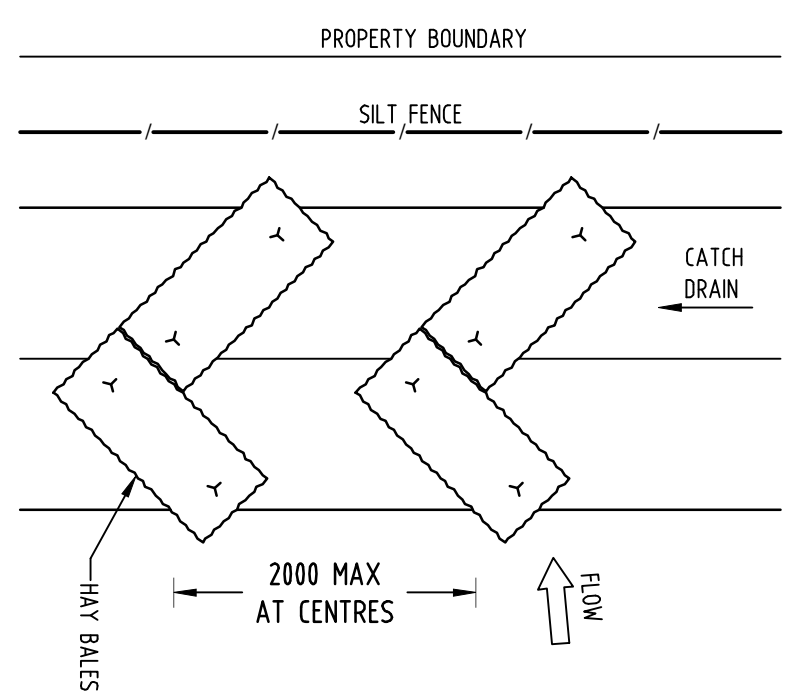
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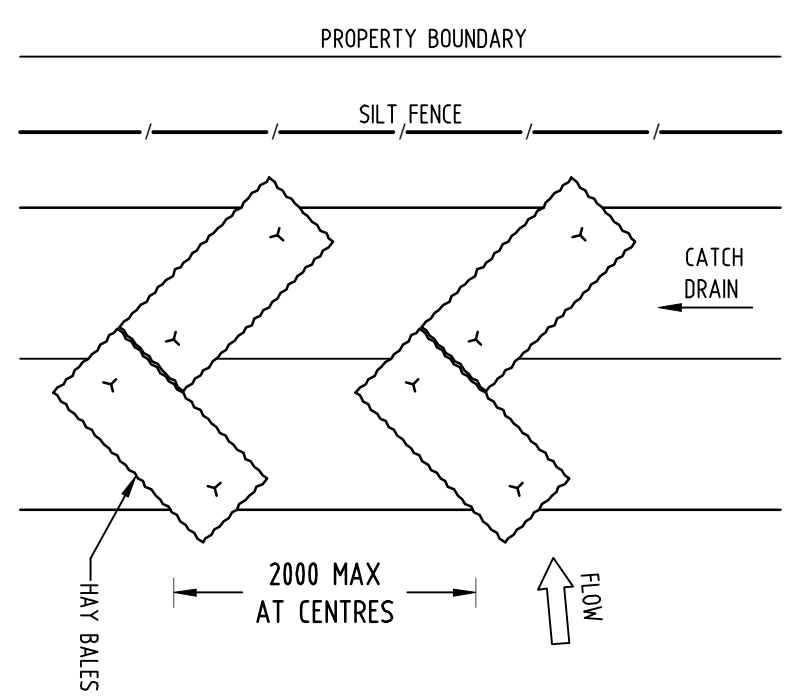
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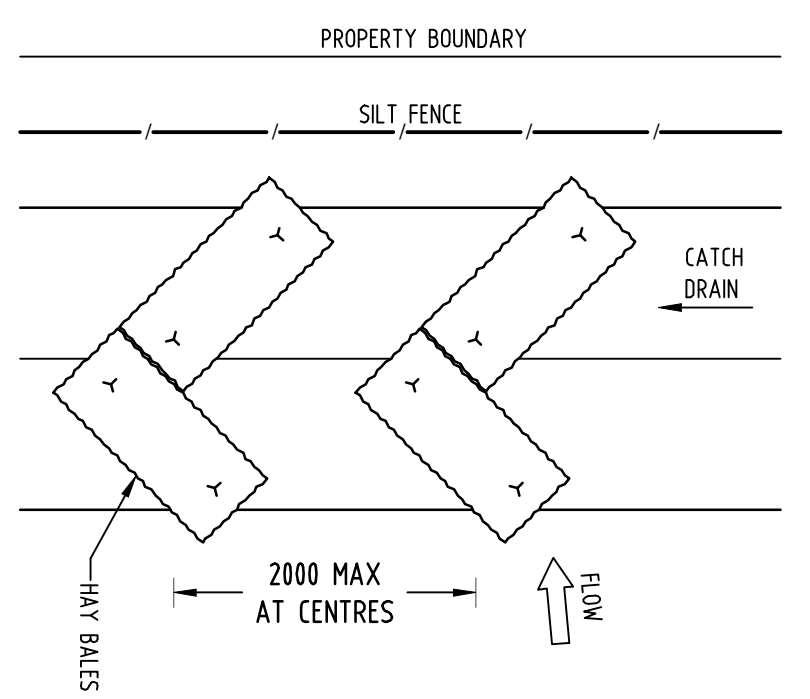
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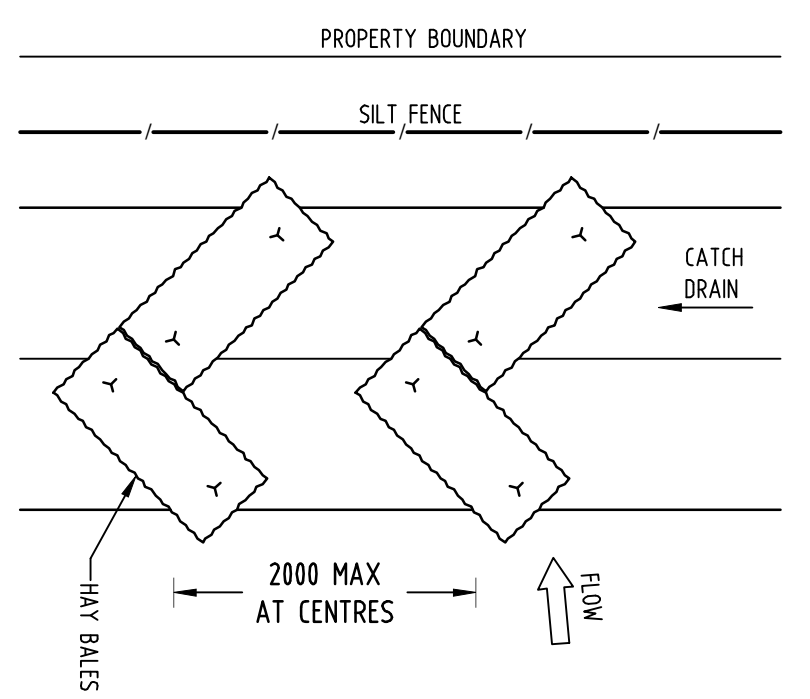
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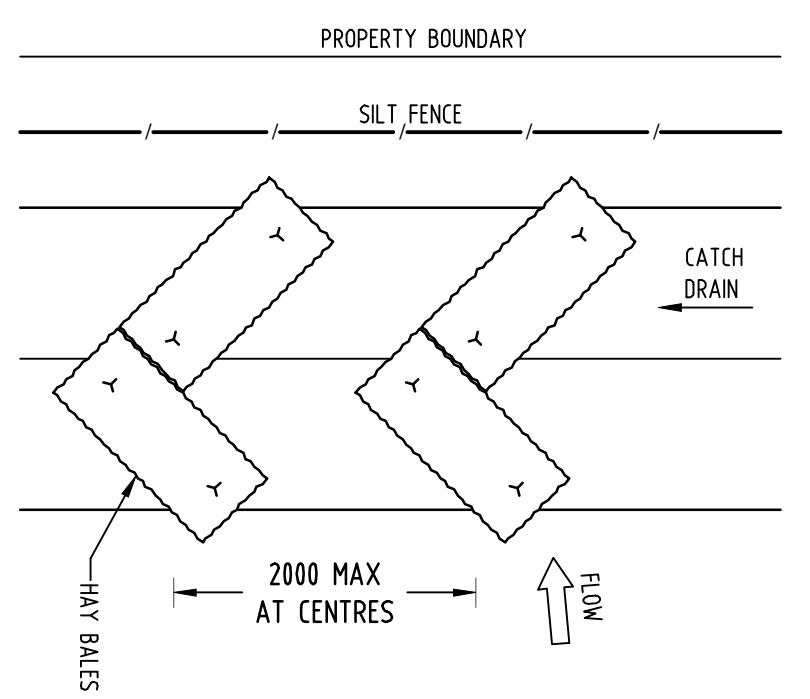
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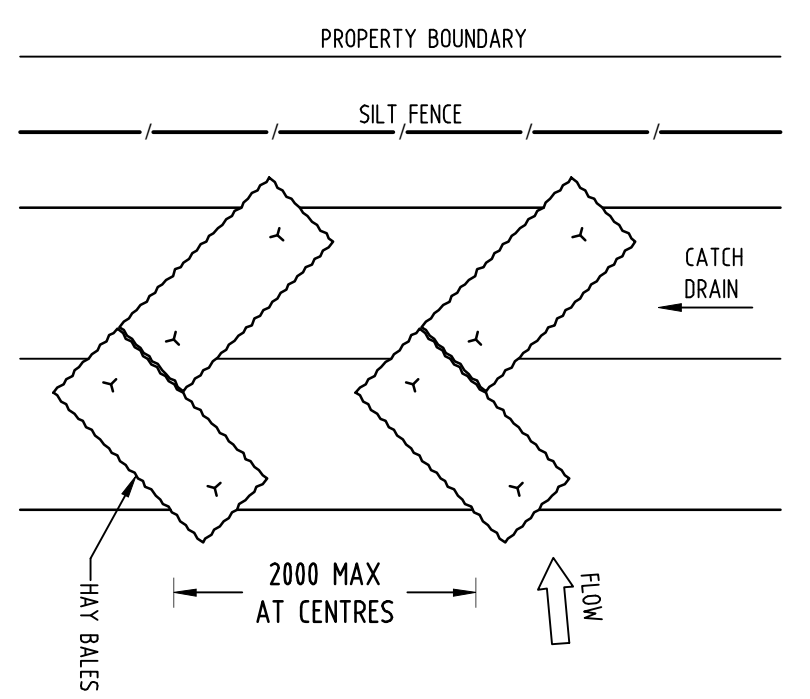
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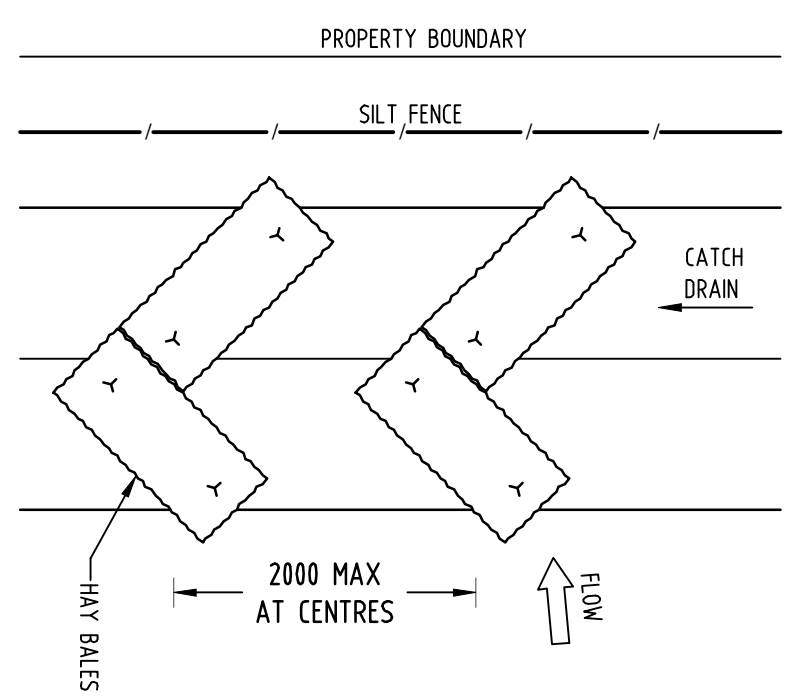
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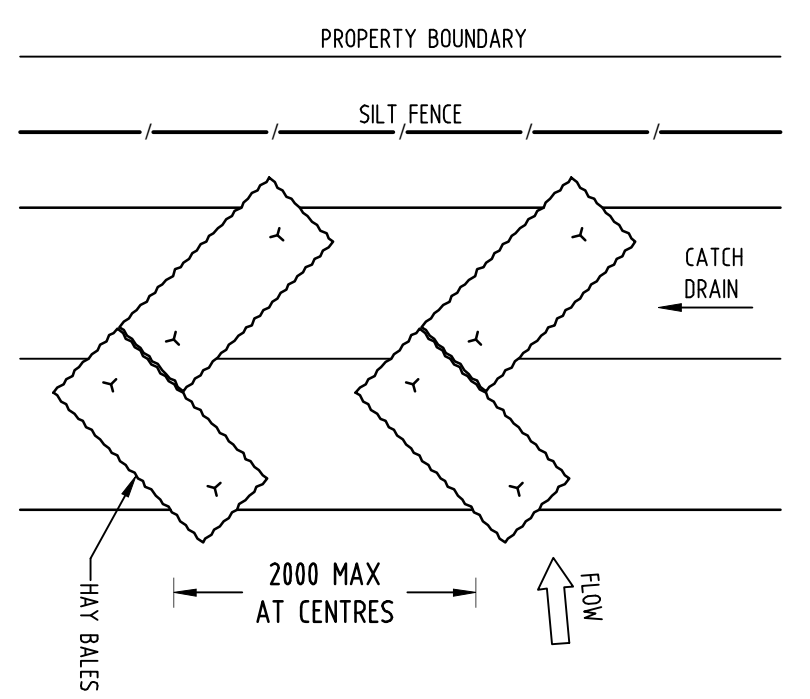
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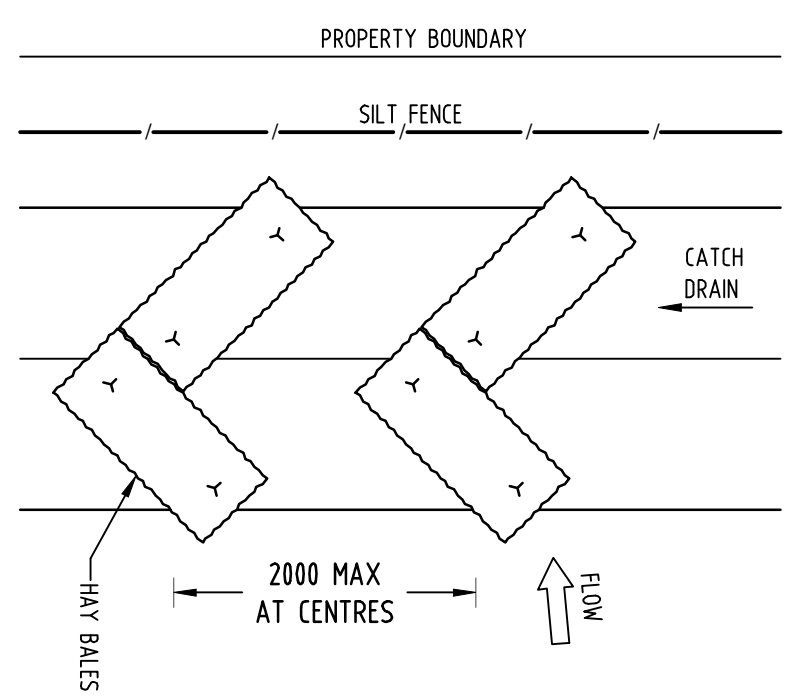
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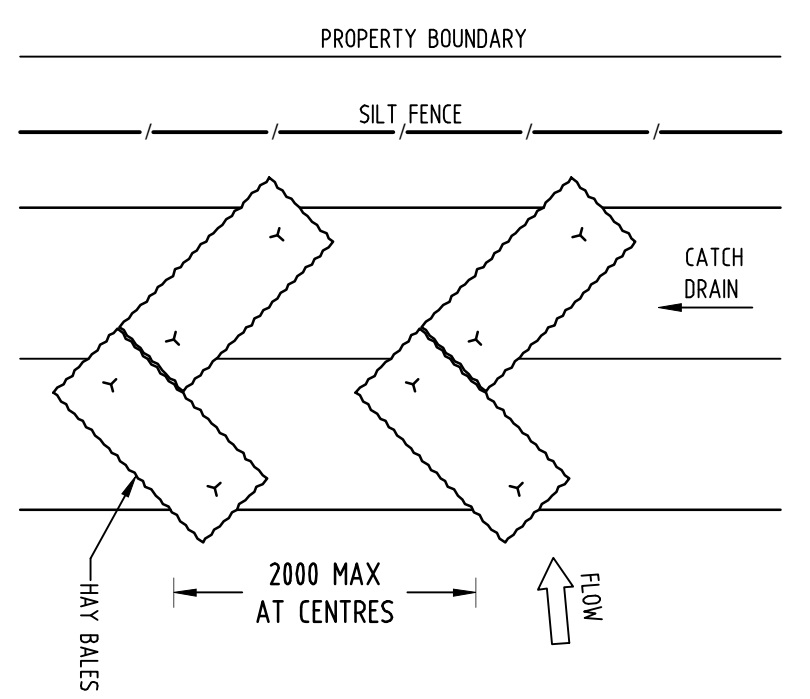
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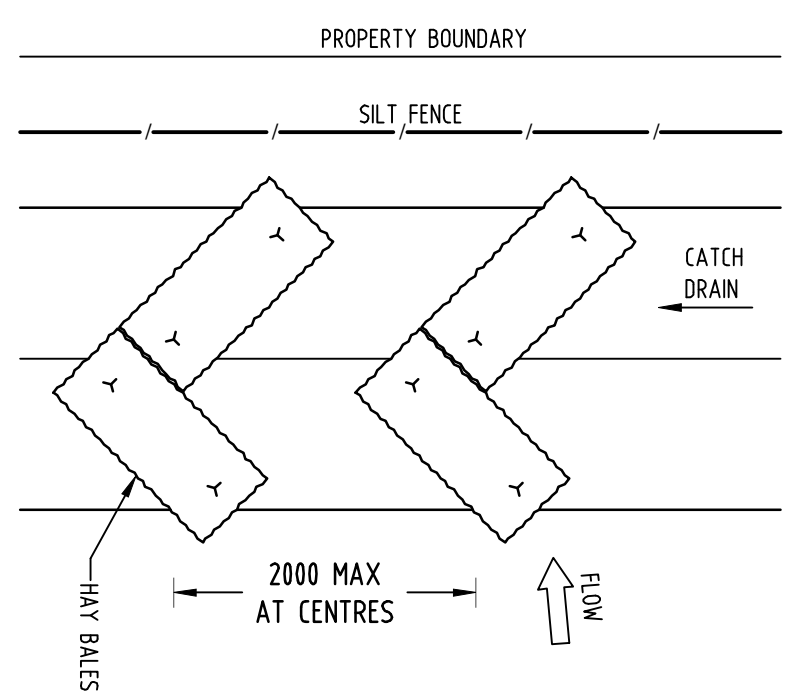
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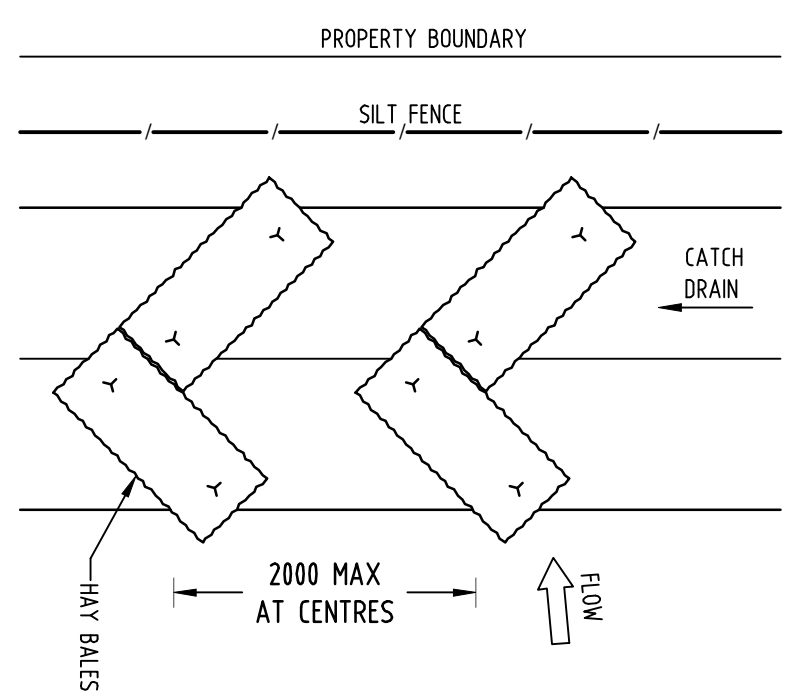
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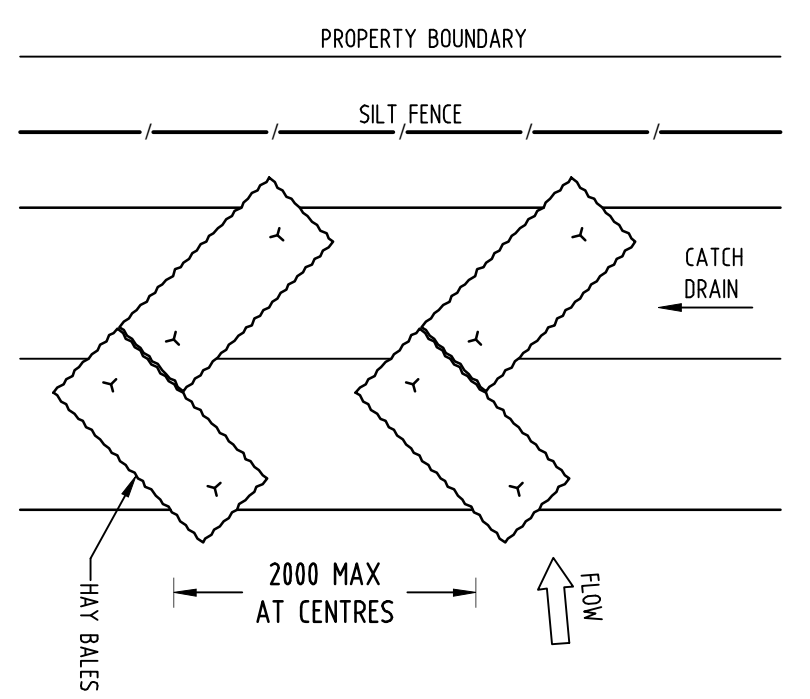
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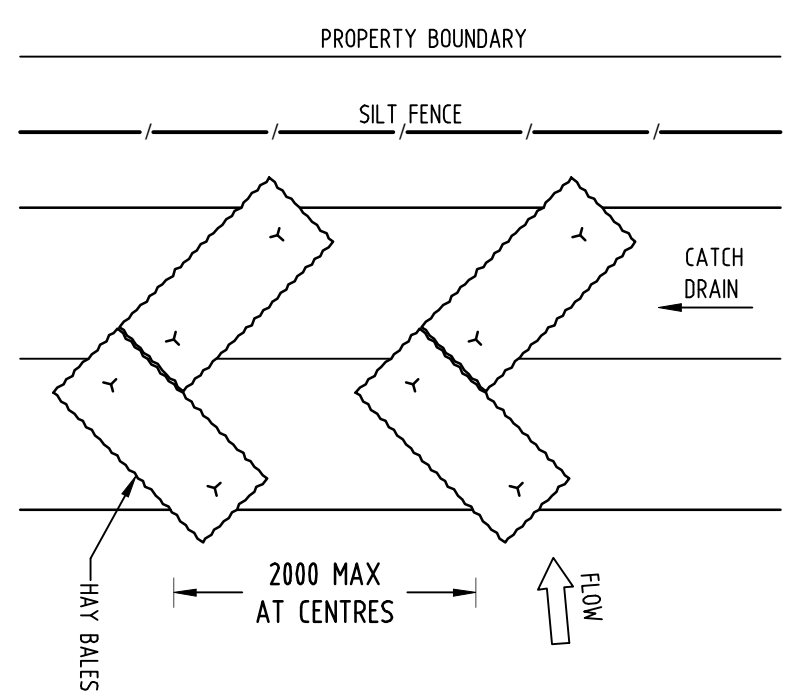
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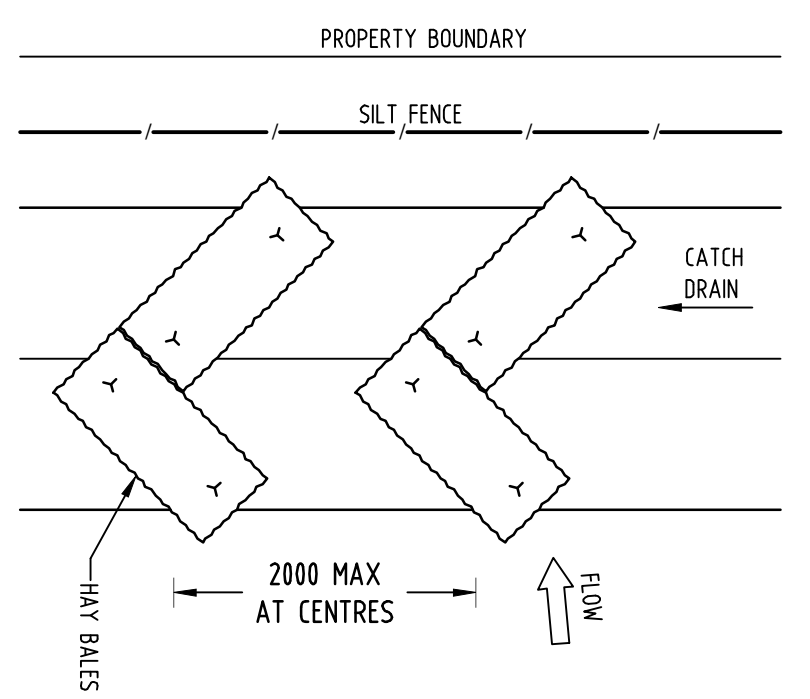
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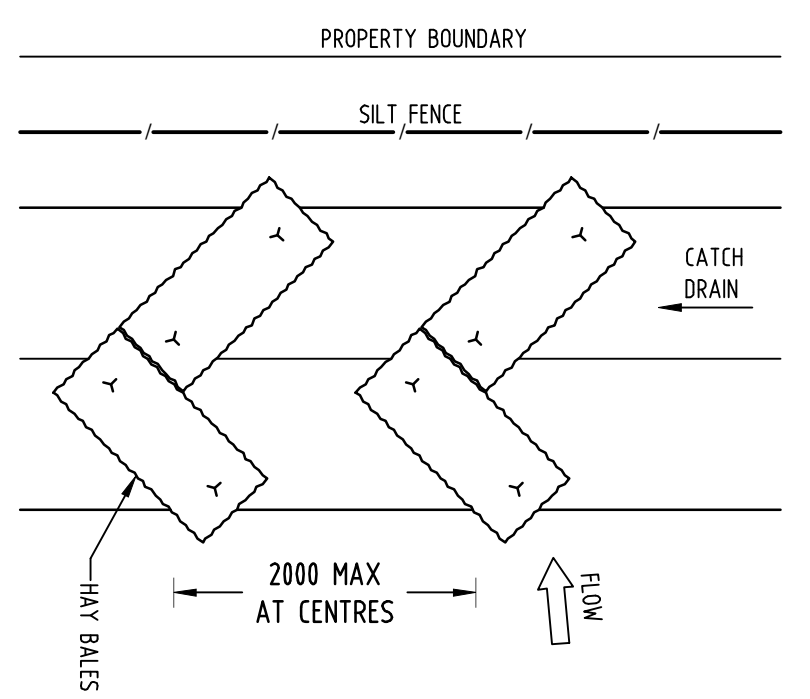
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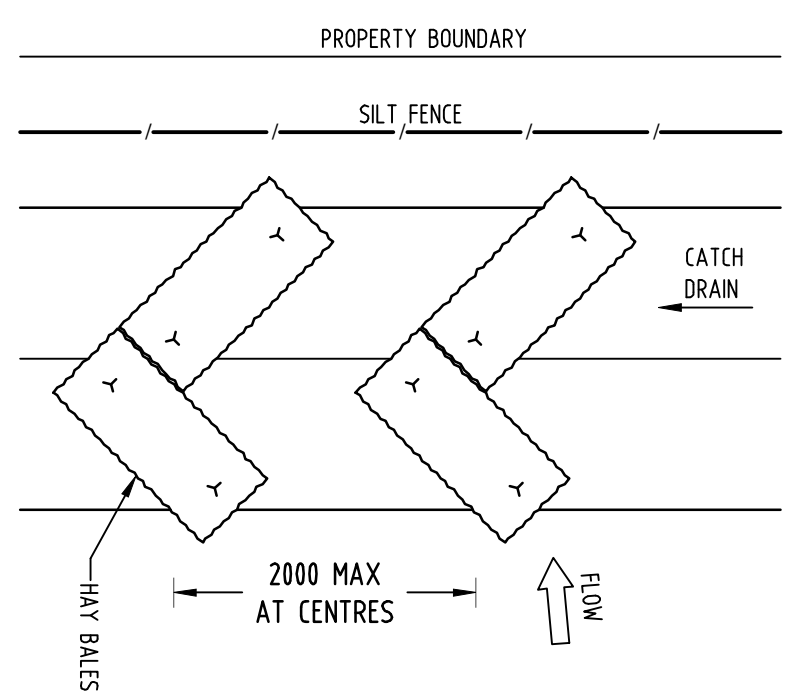
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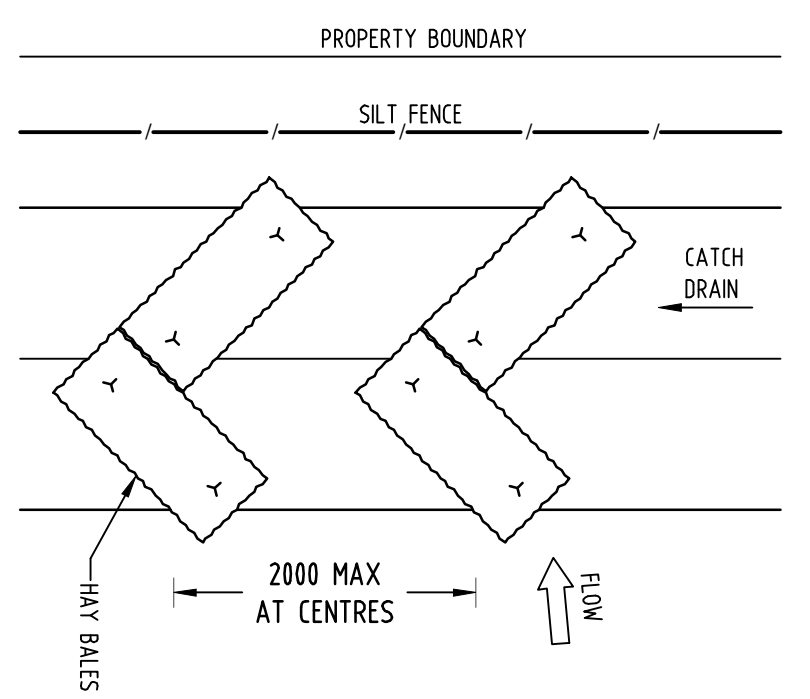
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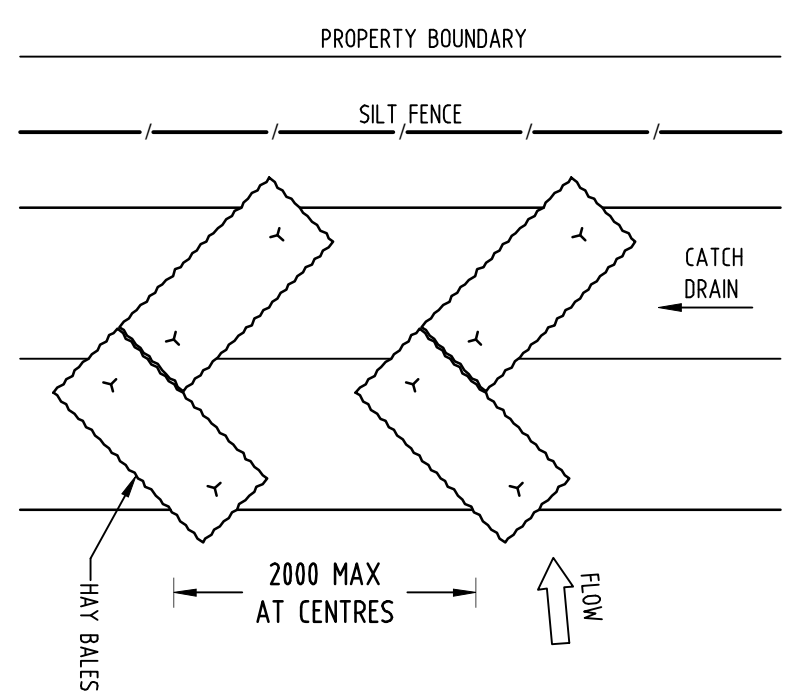
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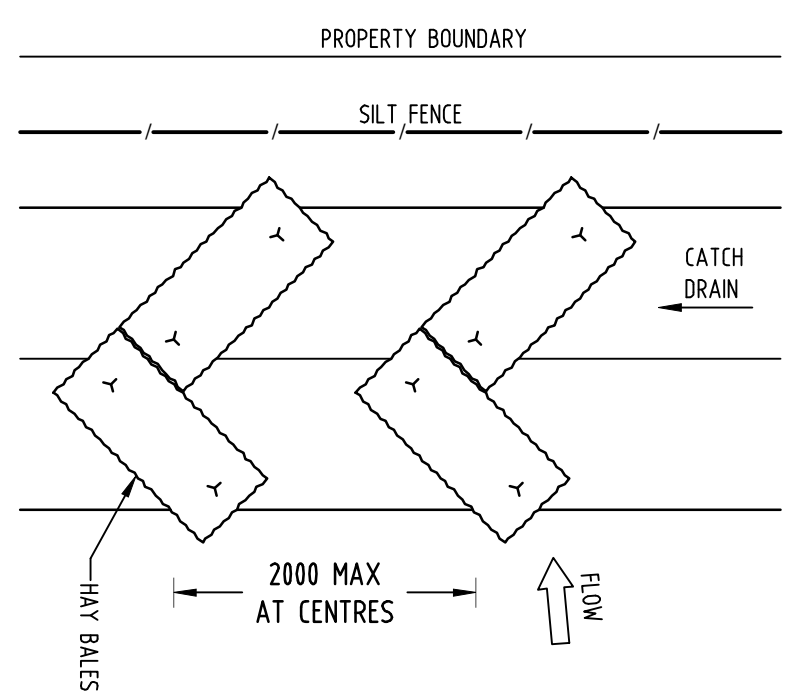
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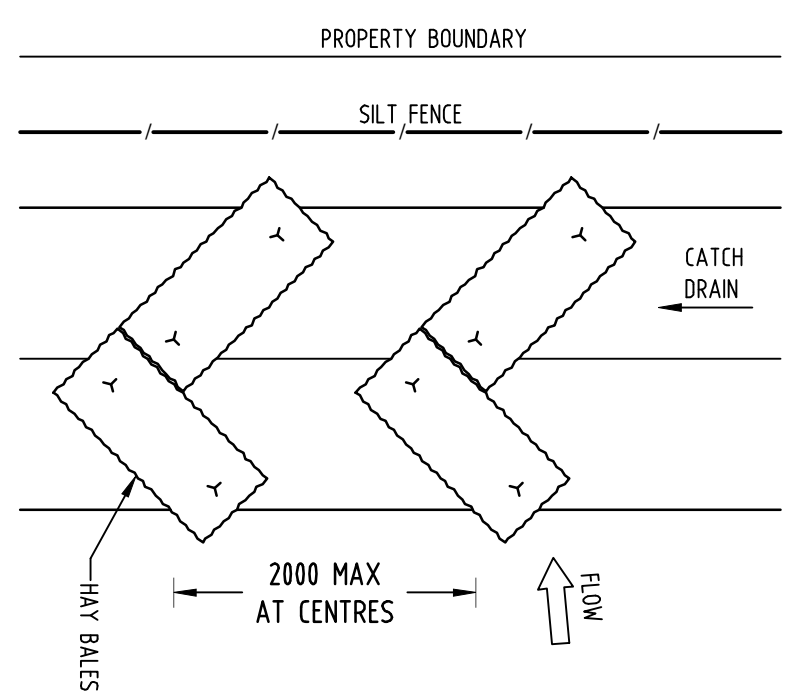
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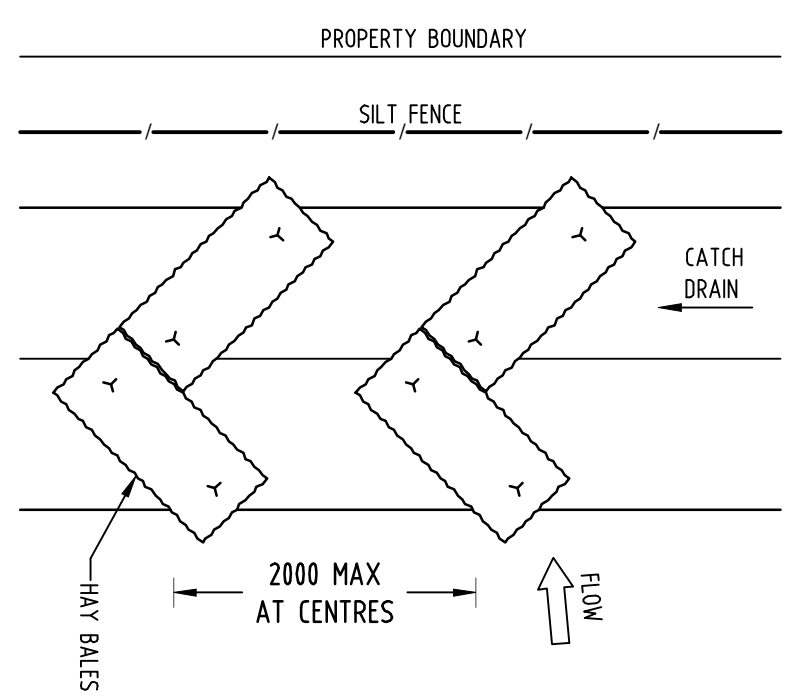
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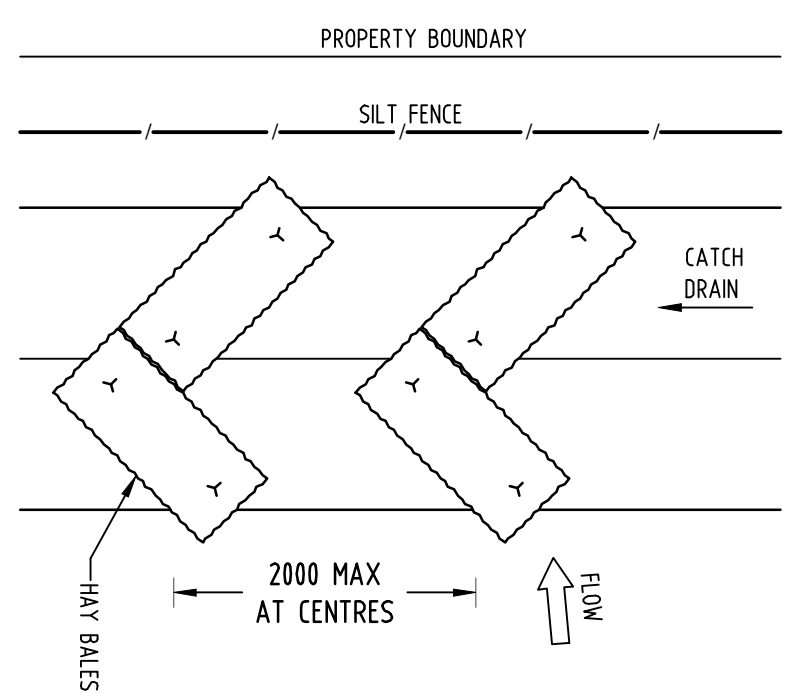
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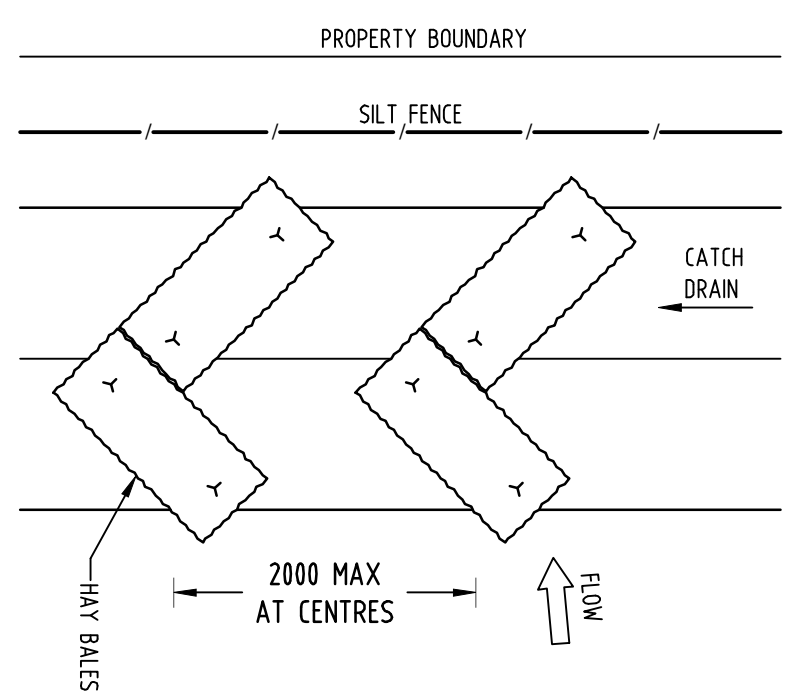
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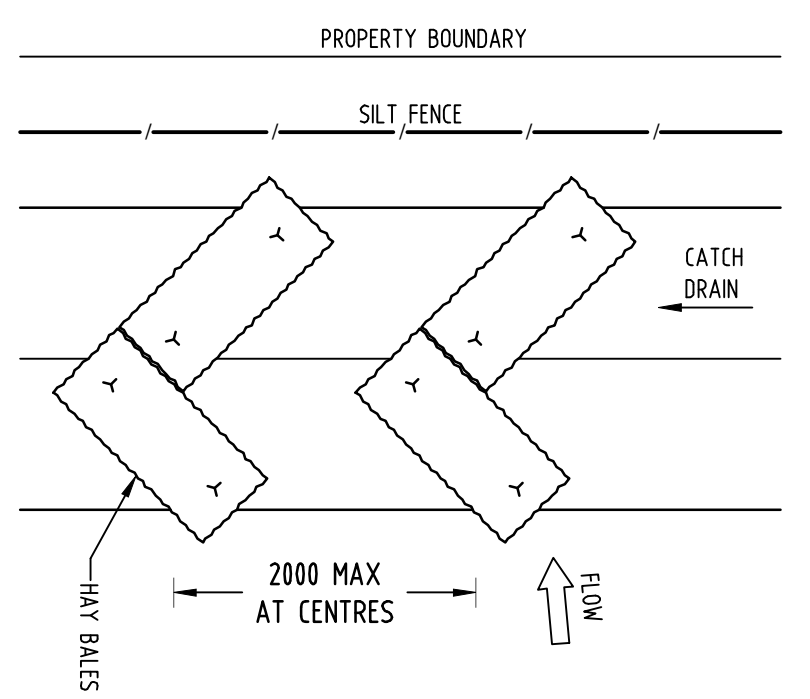
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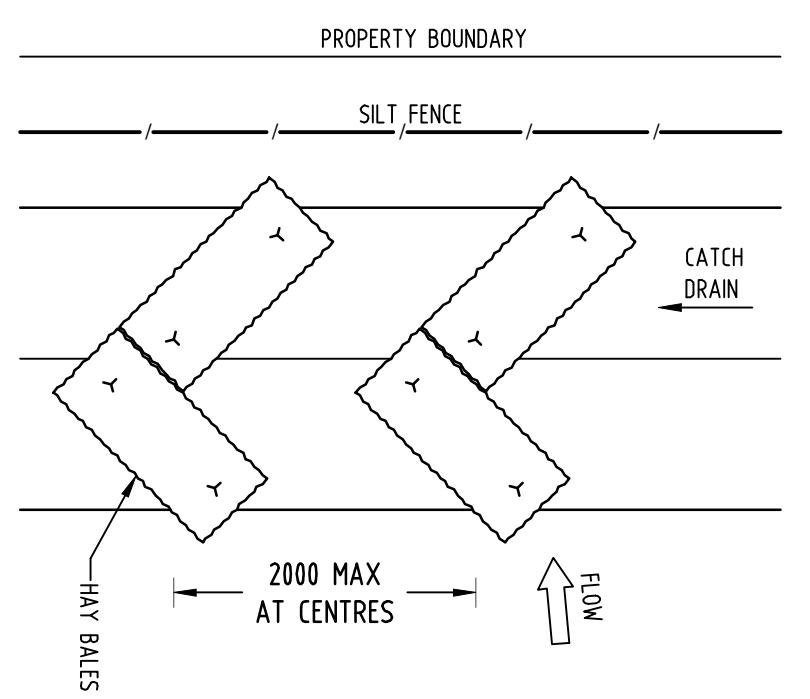
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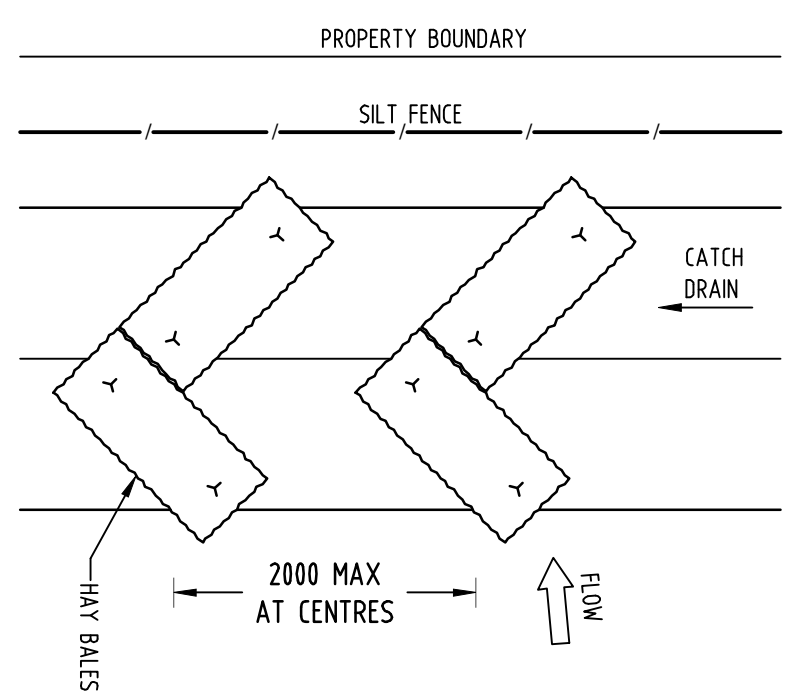
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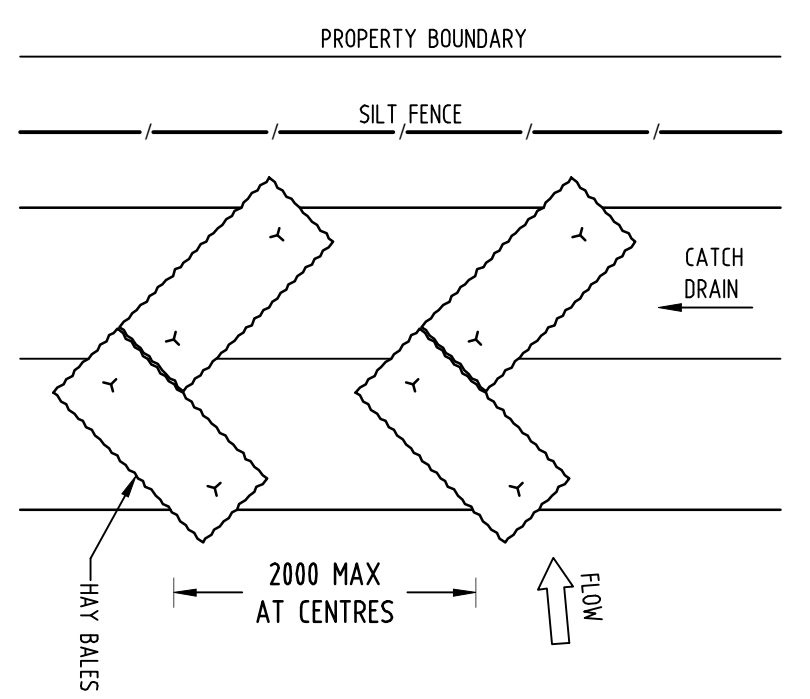
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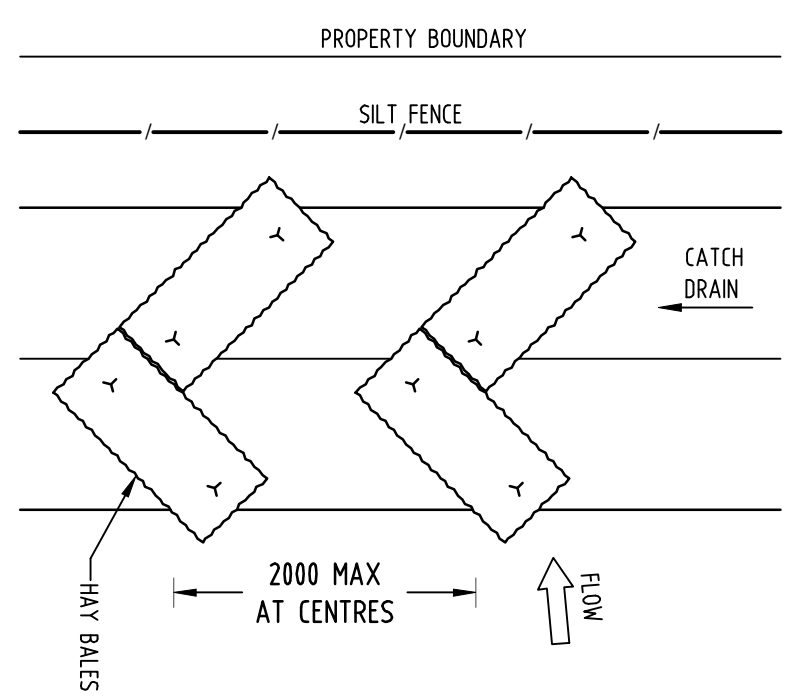
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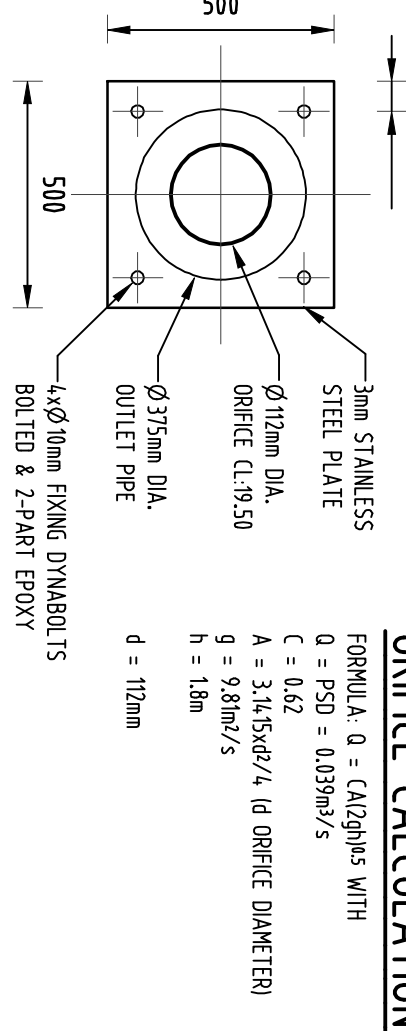
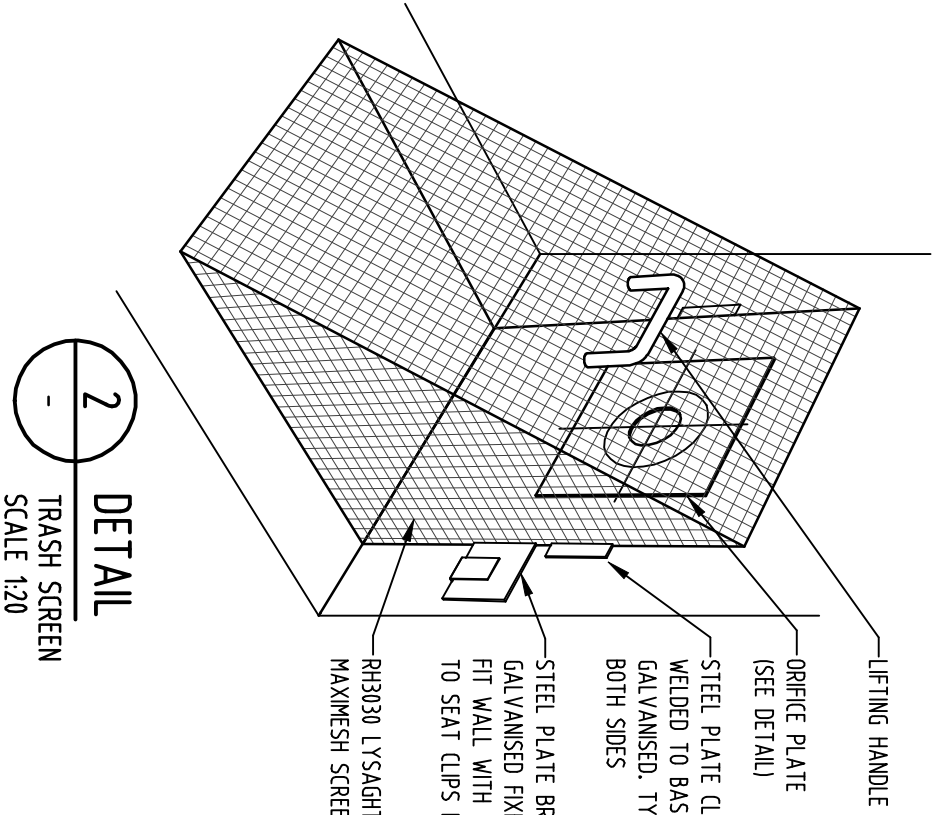
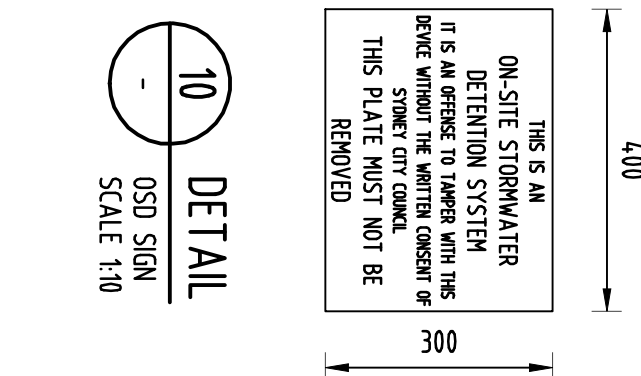
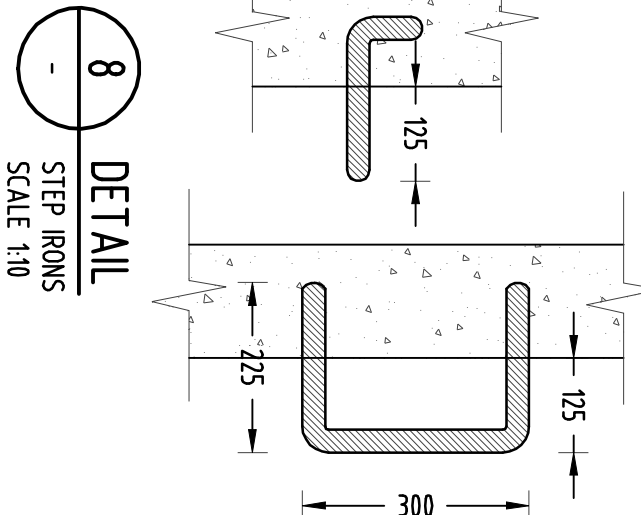
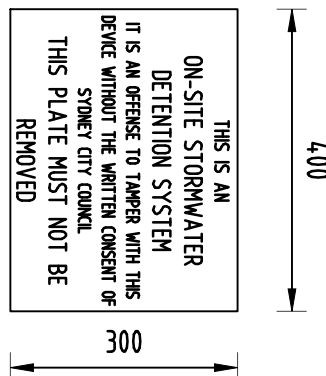
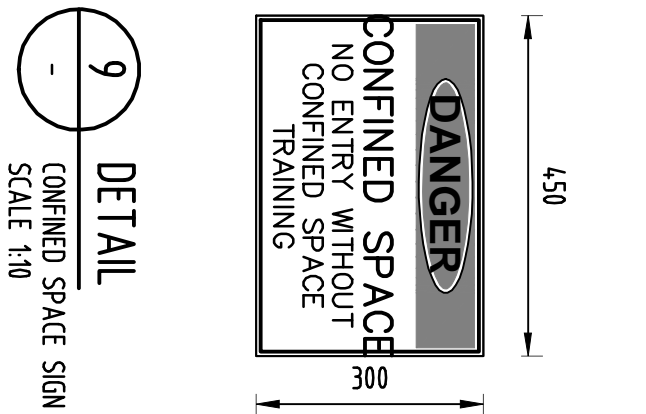
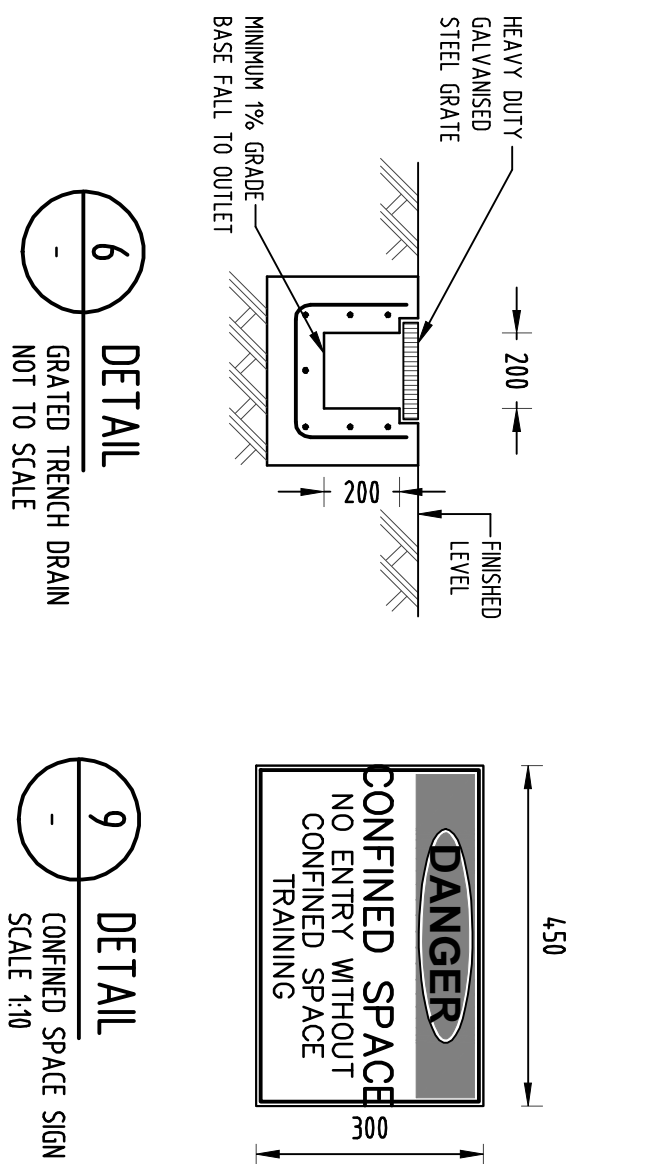


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SCALE 1:50





ORIFICE CALCULATION:

FORMULA:  $Q = C_d A \sqrt{2gh}$  WITH  
 $Q = \text{PSD} = 0.039\text{m}^3/\text{s}$   
 $C_d = 0.62$   
 $A = 3.14 \times 150^2 / 4$  (ORIFICE DIAMETER)  
 $g = 9.81\text{m/s}^2$   
 $h = 1.8\text{m}$   
 $d = 12\text{mm}$

