

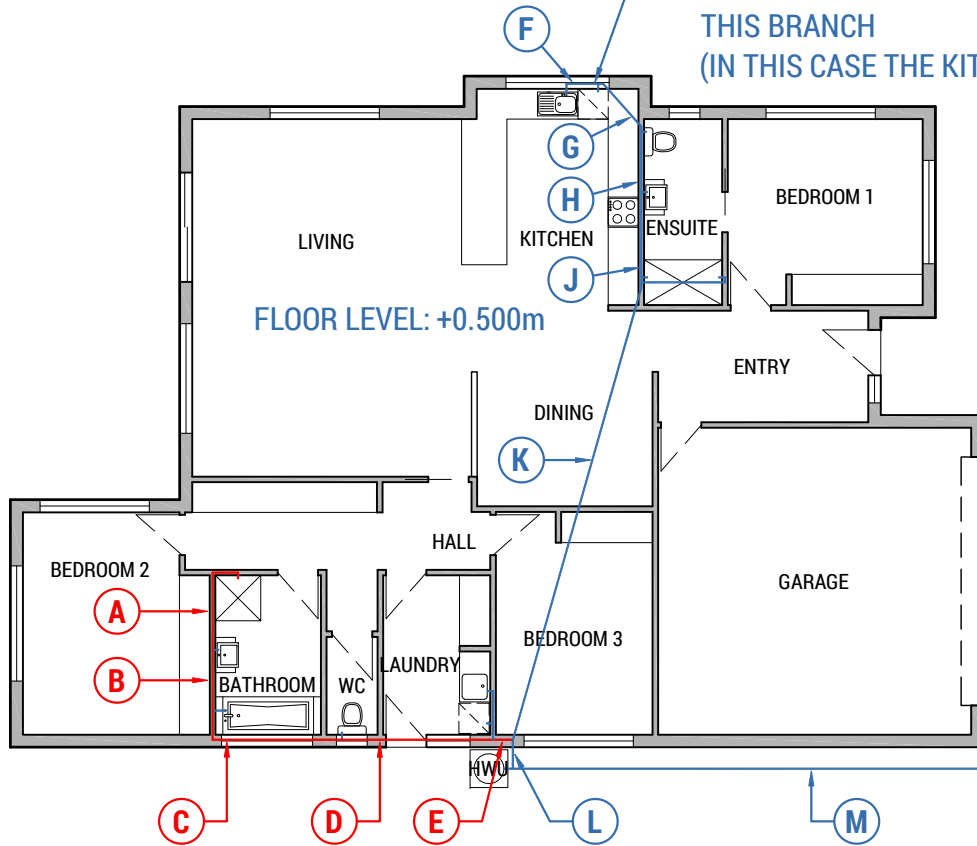
CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



HIGHEST FIXTURE: +2.500m
(IN THIS CASE SHOWER)

INDEX LENGTH: 30m
TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)

FLOOR LEVEL: +0.500m



PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A		
B		
C		
D		
E		
F		
G		
H		
J		
K		
L		
M		

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

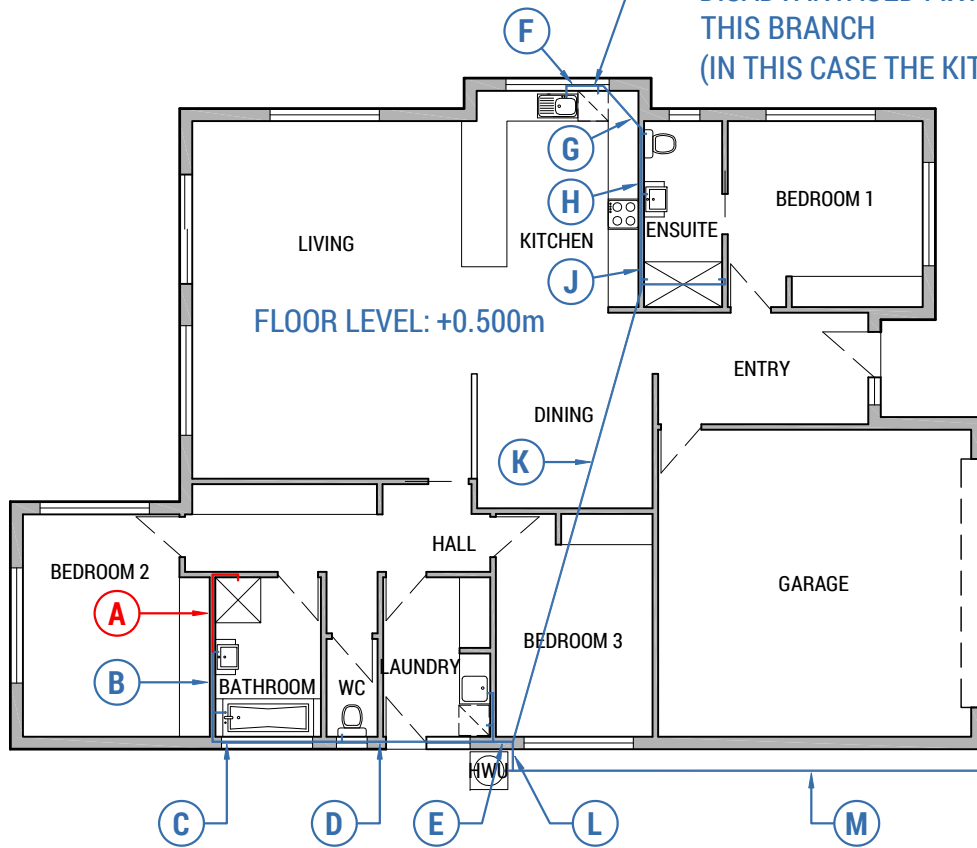
STEP 1 - Calculate segments A-E:
Enter the Supply pressure, Index length and Height from supply.

CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



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TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)



FLOOR LEVEL: +0.500m

PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B		
C		
D		
E		
F		
G		
H		
J		
K		
L		
M		

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

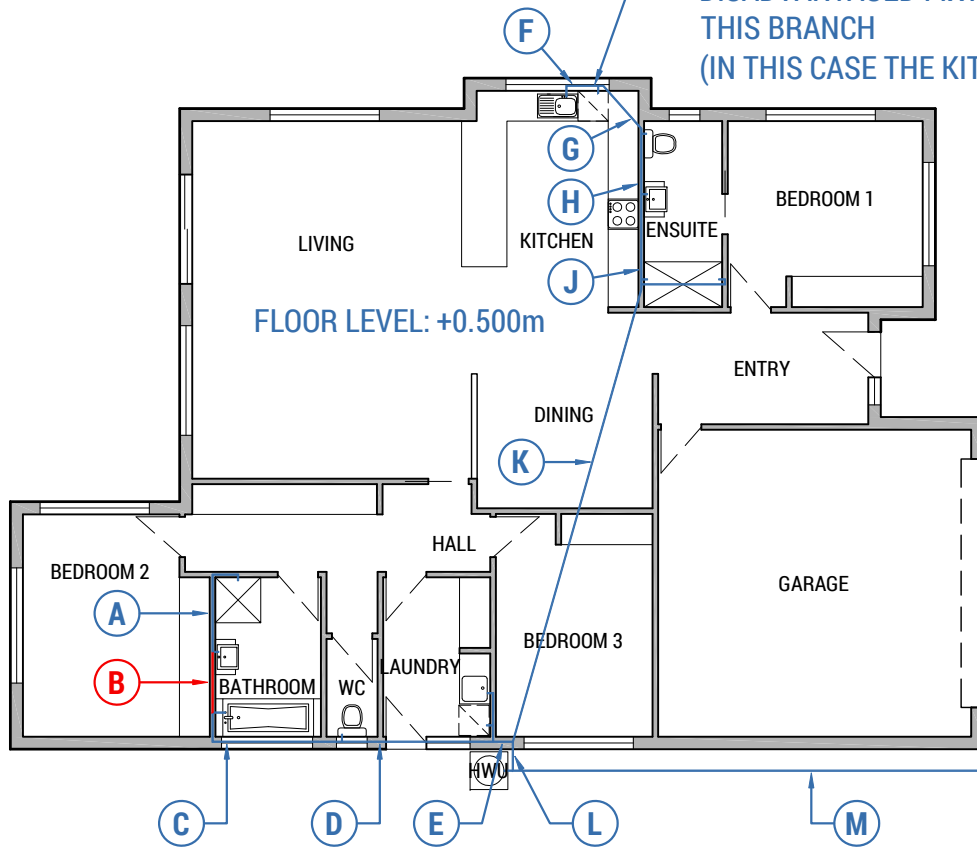
STEP 2 - Calculate segments A-E:
Enter the fixtures supplied by pipe segment A.

CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



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(IN THIS CASE SHOWER)

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TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)



FLOOR LEVEL: +0.500m

PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B	DN15	DN16
C		
D		
E		
F		
G		
H		
J		
K		
L		
M		

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

STEP 3 - Calculate segments A-E:
Enter the fixtures supplied by pipe segment B.

Loading units per dwelling: 3

- Bath
- Basin
- Hose tap (15 nom. size)
- Hose tap (20 nom. size)
- Laundry trough
- Mains pres. water heater
- Shower
- Sink (aerated tap)
- Sink (standard tap)
- Spray tap
- Wash. machine/dishw
- Water closet cistern
- Fixed flow (L/sec) ?

Calculate

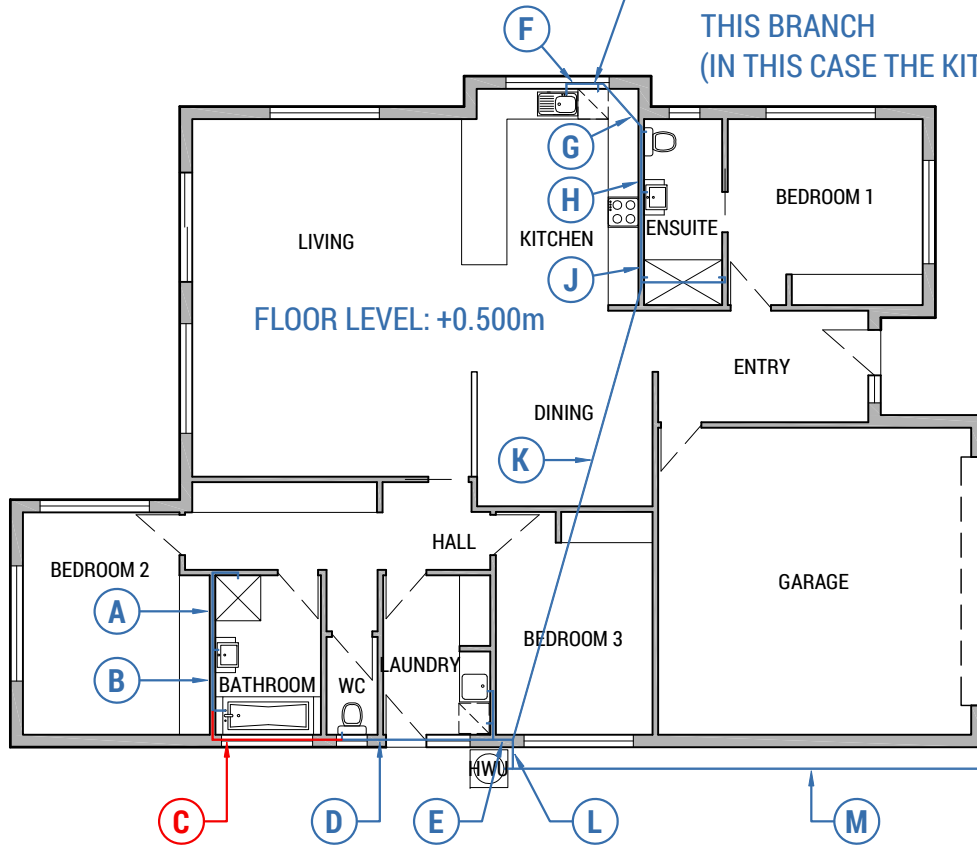
- Copper pipe dia. (mm)
- Polyolefin pipe dia. (mm)

CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



HIGHEST FIXTURE: +2.500m
(IN THIS CASE SHOWER)

INDEX LENGTH: 30m
TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)



PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B	DN15	DN16
C	DN18	DN16
D		
E		
F		
G		
H		
J		
K		
L		
M		

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

STEP 4 - Calculate segments A-E:
Enter the fixtures supplied by pipe segment C.

Loading units per dwelling: 11

- Bath
- Basin
- Hose tap (15 nom. size)
- Hose tap (20 nom. size)
- Laundry trough
- Mains pres. water heater
- Shower
- Sink (aerated tap)
- Sink (standard tap)
- Spray tap
- Wash. machine/dishw
- Water closet cistern

Fixed flow (L/sec) ?

Calculate

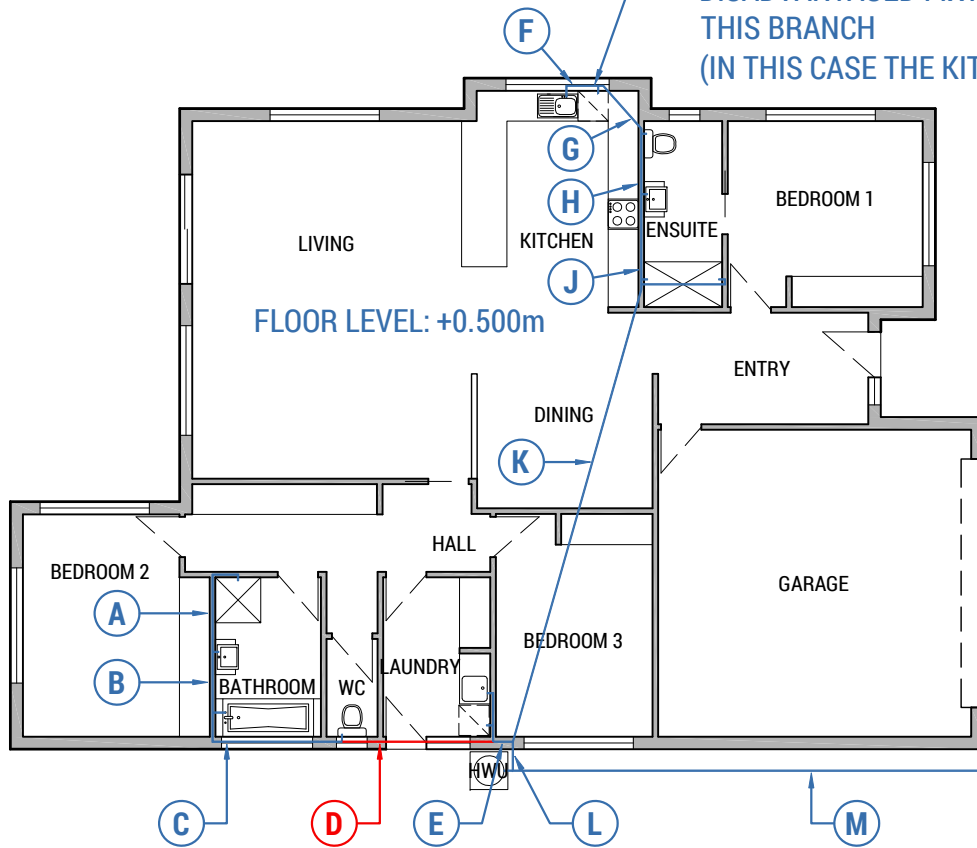
- Copper pipe dia. (mm)
- Polyolefin pipe dia. (mm)

CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



HIGHEST FIXTURE: +2.500m
(IN THIS CASE SHOWER)

INDEX LENGTH: 30m
TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)



PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B	DN15	DN16
C	DN18	DN16
D	DN18	DN20
E		
F		
G		
H		
J		
K		
L		
M		

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

STEP 5 - Calculate segments A-E:
Enter the fixtures supplied by pipe segment D.

Loading units per dwelling: 13

- Bath
- Basin
- Hose tap (15 nom. size)
- Hose tap (20 nom. size)
- Laundry trough
- Mains pres. water heater
- Shower
- Sink (aerated tap)
- Sink (standard tap)
- Spray tap
- Wash. machine/dishw
- Water closet cistern

Fixed flow (L/sec)

Calculate

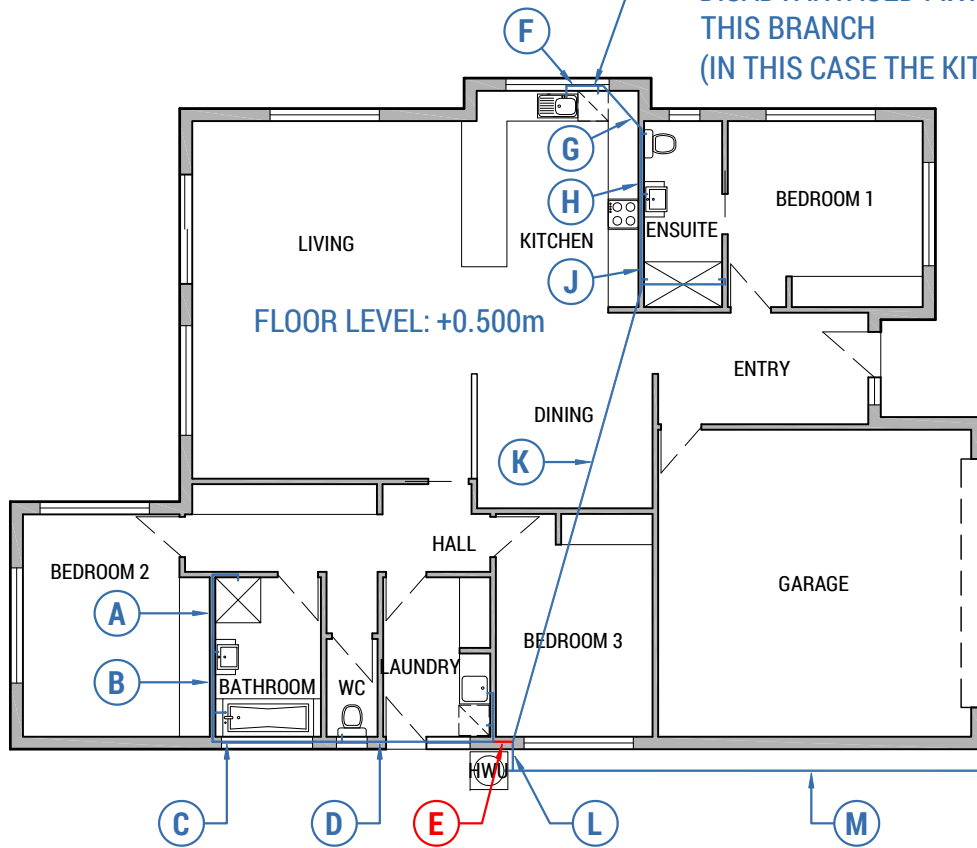
- Copper pipe dia. (mm)
- Polyolefin pipe dia. (mm)

CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



HIGHEST FIXTURE: +2.500m
(IN THIS CASE SHOWER)

INDEX LENGTH: 30m
TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)



PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B	DN15	DN16
C	DN18	DN16
D	DN18	DN20
E	DN20	DN20
F		
G		
H		
J		
K		
L		
M		

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

STEP 6 - Calculate segments A-E:
Enter the fixtures supplied by pipe segment E.

Loading units per dwelling: 19

- Bath
- Basin
- Hose tap (15 nom. size)
- Hose tap (20 nom. size)
- Laundry trough
- Mains pres. water heater
- Shower
- Sink (aerated tap)
- Sink (standard tap)
- Spray tap
- Wash. machine/dishw
- Water closet cistern

Fixed flow (L/sec) ?

Calculate

- Copper pipe dia. (mm)
- Polyolefin pipe dia. (mm)

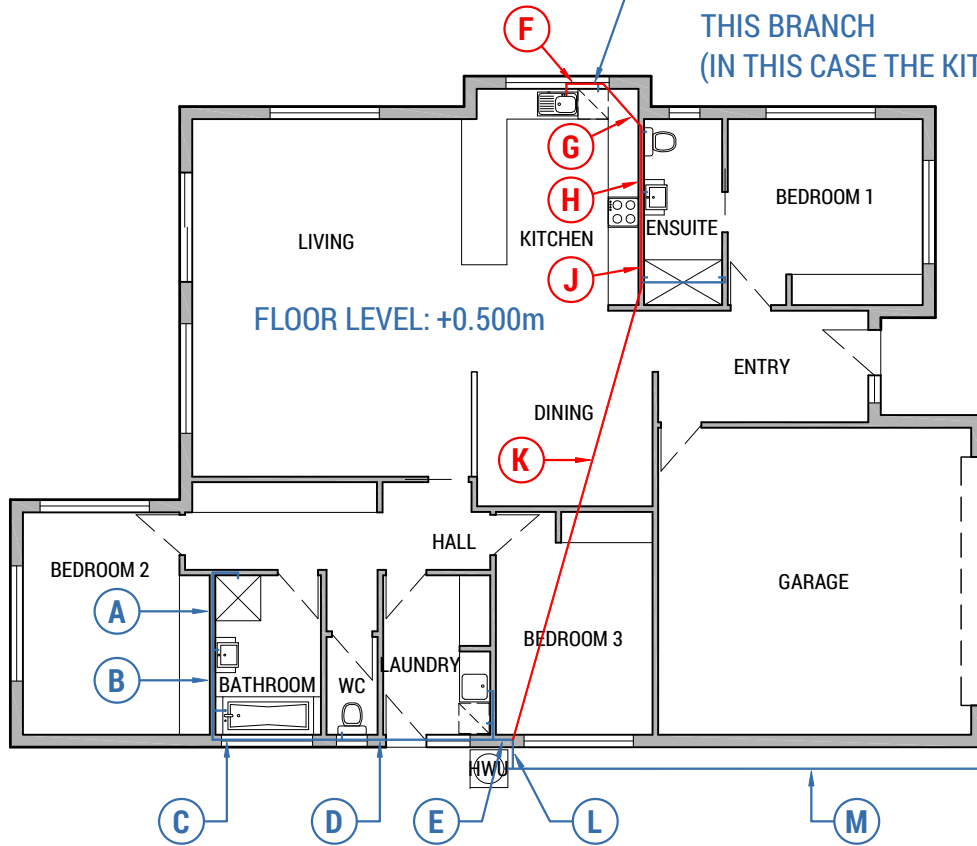
CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



HIGHEST FIXTURE: +2.500m
(IN THIS CASE SHOWER)

INDEX LENGTH: 30m
TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)

FLOOR LEVEL: +0.500m

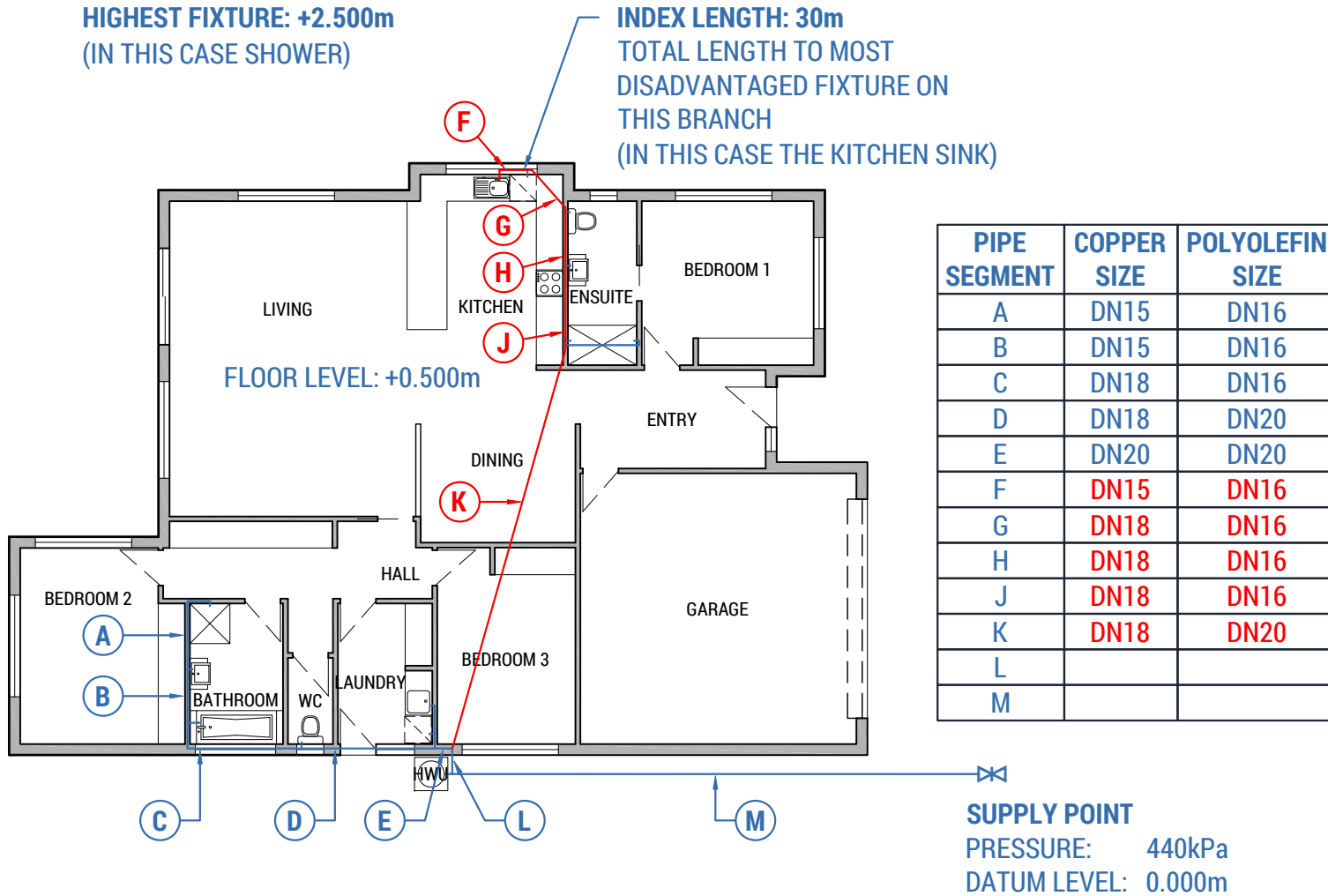


PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B	DN15	DN16
C	DN18	DN16
D	DN18	DN20
E	DN20	DN20
F		
G		
H		
J		
K		
L		
M		

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

STEP 7 - Calculate segments F-K:
Reset and enter the Supply pressure,
Index length and Height from supply.

CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B	DN15	DN16
C	DN18	DN16
D	DN18	DN20
E	DN20	DN20
F	DN15	DN16
G	DN18	DN16
H	DN18	DN16
J	DN18	DN16
K	DN18	DN20
L		
M		

STEP 8 - Calculate segments F-K:
Enter the fixtures supplied by pipe segment F. Repeat for all pipe sections on this branch.

Loading units per dwelling: 12

- Bath
- Basin
- Hose tap (15 nom. size)
- Hose tap (20 nom. size)
- Laundry trough
- Mains pres. water heater
- Shower
- Sink (aerated tap)
- Sink (standard tap)
- Spray tap
- Wash. machine/dishw
- Water closet cistern

Fixed flow (L/sec) ?

Calculate

- Copper pipe dia. (mm)
- Polyolefin pipe dia. (mm)

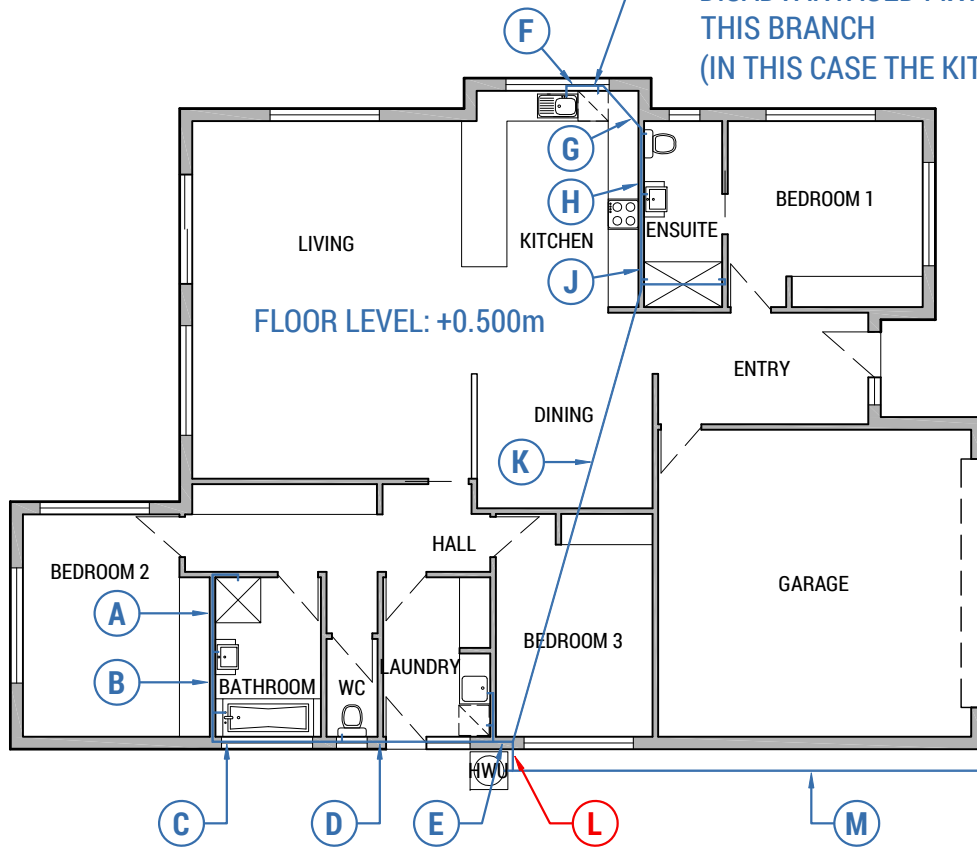
NOTE: Pipe sizes calculated are minimum sizes, the designer shall reference AS3500.1-2015 Section 3.5 to ensure compliance.

CALCULATE THE INTERNAL PIPEWORK AND MAIN SUPPLY FOR A HOUSE



HIGHEST FIXTURE: +2.500m
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INDEX LENGTH: 30m
TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)



FLOOR LEVEL: +0.500m

PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B	DN15	DN16
C	DN18	DN16
D	DN18	DN20
E	DN20	DN20
F	DN15	DN16
G	DN18	DN16
H	DN18	DN16
J	DN18	DN16
K	DN18	DN20
L	DN20	DN25
M		

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

STEP 9 - Calculate segment L:
Add the fixtures from segments A-E to calculate pipe segment L.

Loading units per dwelling: 31

- 1 Bath
- 2 Basin
- Hose tap (15 nom. size)
- Hose tap (20 nom. size)
- 1 Laundry trough
- Mains pres. water heater
- 3 Shower
- 1 Sink (aerated tap)
- Sink (standard tap)
- Spray tap
- 2 Wash. machine/dishw
- 2 Water closet cistern
- 0 Fixed flow (L/sec) ?

Calculate

- 20 Copper pipe dia. (mm)
- 25 Polyolefin pipe dia. (mm)

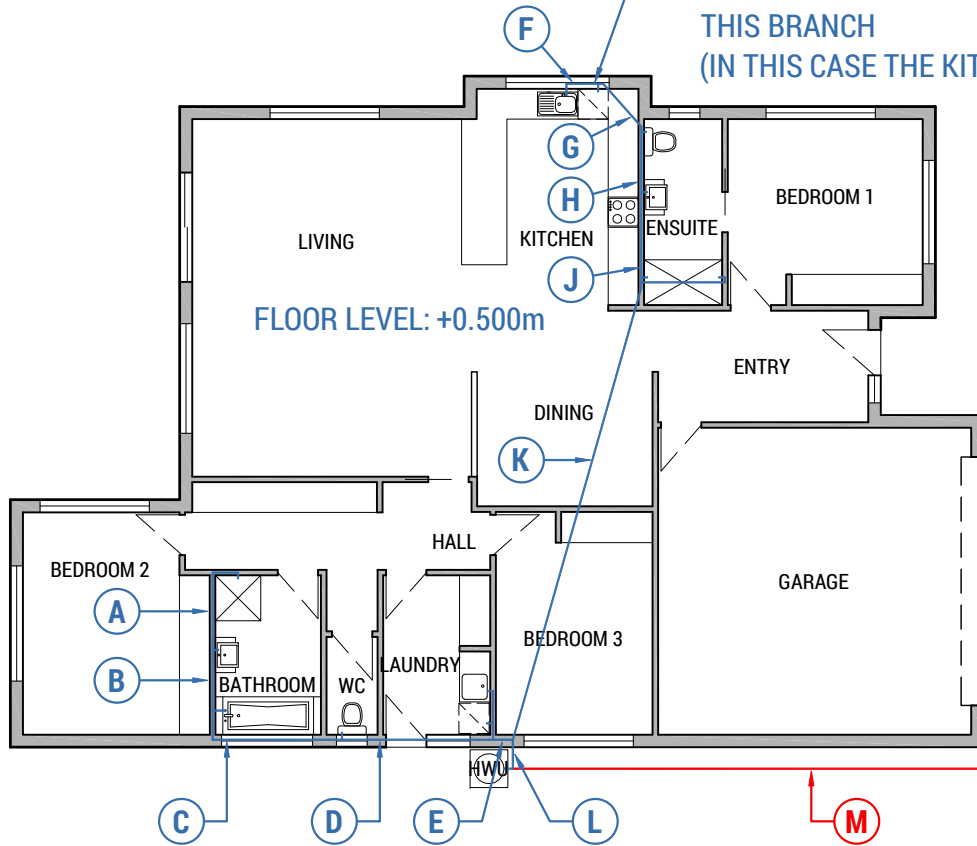
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TOTAL LENGTH TO MOST
DISADVANTAGED FIXTURE ON
THIS BRANCH
(IN THIS CASE THE KITCHEN SINK)

FLOOR LEVEL: +0.500m



PIPE SEGMENT	COPPER SIZE	POLYOLEFIN SIZE
A	DN15	DN16
B	DN15	DN16
C	DN18	DN16
D	DN18	DN20
E	DN20	DN20
F	DN15	DN16
G	DN18	DN16
H	DN18	DN16
J	DN18	DN16
K	DN18	DN20
L	DN20	DN25
M	DN25	DN25

SUPPLY POINT
PRESSURE: 440kPa
DATUM LEVEL: 0.000m

STEP 10 - Calculate segment M:
Add the mains pressure water heater to calculate segment M.

Loading units per dwelling: 39

- Bath
- Basin
- Hose tap (15 nom. size)
- Hose tap (20 nom. size)
- Laundry trough
- Mains pres. water heater
- Shower
- Sink (aerated tap)
- Sink (standard tap)
- Spray tap
- Wash. machine/dishw
- Water closet cistern

Fixed flow (L/sec) ?

Calculate

- Copper pipe dia. (mm)
- Polyolefin pipe dia. (mm)