BOROUGH OF ALEXANDRA

PLAN OF SUB-DIVISIONS & SEWERAGE

SCALE: 1 INCH = 4 CHAINS.

A539

66/4/264

TOWN

TOWN

BELT

BELT

PRIMARY SCHOOL

HIGH SCHOOL

SH

GRIGG ST

SEPTIC TANKS

ENTERPRISE ST

MERELLAR ST

MARSLIN ST

OTAGO CENTRAL RAILWAY

DUNSTAN ROAD

CHICAGO ST

STATION

RAILWAY STATION & YARDS

INCAHUKA ST

BRANDON ST

SH 77

SAMSON ST

THE TERRACE

SPENCER ST

SIMMONDS ST

KILLARNEY ST

EUREKA ST

ASHWORTH ST

CLUTHA ST

THEVERS ST

MATAU ST

BRINGANS ST

BRANDON ST

MOA ST

CENTENNIAL ST

VENTRY ST

LENMARE ST

PANTRY ST

STREET

AVENUE

SHANNON ST

SCHOOL

SCHOOL

CONVENT

FINDLAY ST

FASTNET ST

MAPLE ST

KERRY ST

RECREATION RESERVE

Sports Pavilion

Tennis Courts

Bowling Green

WALTON ST

TARBERT ST

SKIRD ST

THOMSON ST

DEAL ST

DUNORLING ST

REDMAN ST

ENNIS ST

LIMERICK ST

ATHLONE ST

McDONALD

CLUTHA RIVER

DREDGE TAILINGS

MANUHERIKIA RIVER

EASTERN OUTFALL

WESTERN OUTFALL

NB. Correction to levels shown to bring in terms of M.S.L. Dunedin Datum Add 0.92m
Hughes JH&P 20/3/79

— LEGEND —

○ Building (either house or business) which requires sewerage connection. Some have septic tanks at present.

• 419.10. Manhole & Invert Level

N.B. Levels are on Hydro Datum 409.16' = 0 ft on staff gauge at Alexandra Bridge.

Level Mill [illegible]

CENTENNIAL AVENUE

KENMARE STREET

BANTRY STREET

BRANDON STREET

SHANNON STREET

M.H.

C.E.

D 4

E 4

1 CM → 1"

SEMERENCE

GREGG ST.

ROYAL TERRACE

KILLARNEY ST.

ENTERPRISE STREET

KENMARE STREET

MOA STREET

CENTENNIAL AVENUE

CE.

M.H.

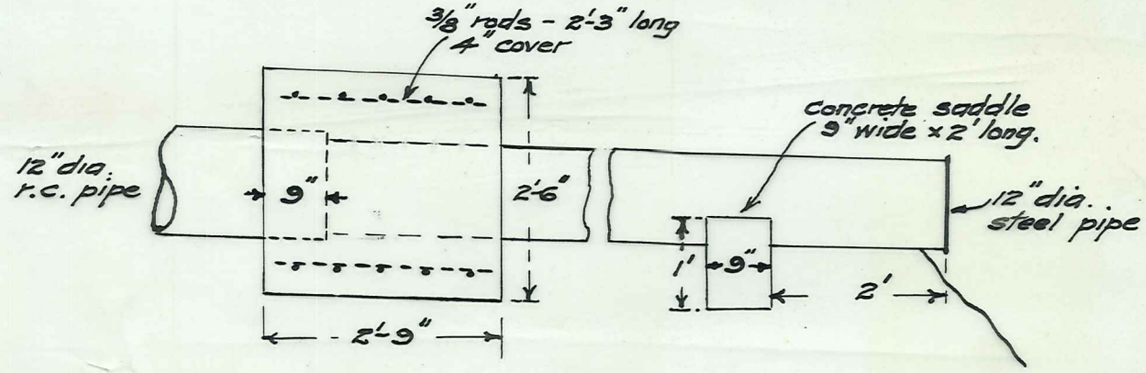
18'

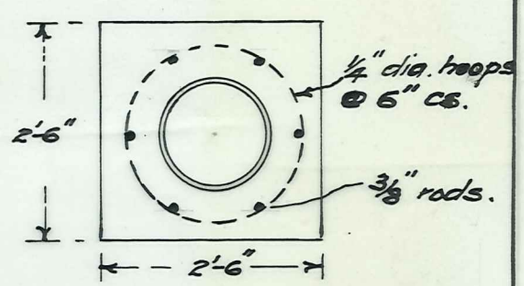
Check on site Before Tracing

B 4

Check on site Before Tracing

holes in is Length.





End View.

Details of Junction Block & Saddle.
Scale 2' to 1"

PROPOSED NEW SEWER OUTLET INTO MANUHERIKIA RIVER.

Longitudinal Section.

Scales Vert 10' to 1"
Horiz 1 ch. to 1"

Note: Levels are based on Clutha R. Hydroelectric survey datum.

J.D.W 11·4·56.

EXTENSIONS TO TRUNK SERVICES
SEWERAGE RETICULATION
8693/6

STAGE 1
STAGE 2
STAGE 3
STAGE 4

SCALE 1:10000

ORIGINAL SIZE mm INCHES

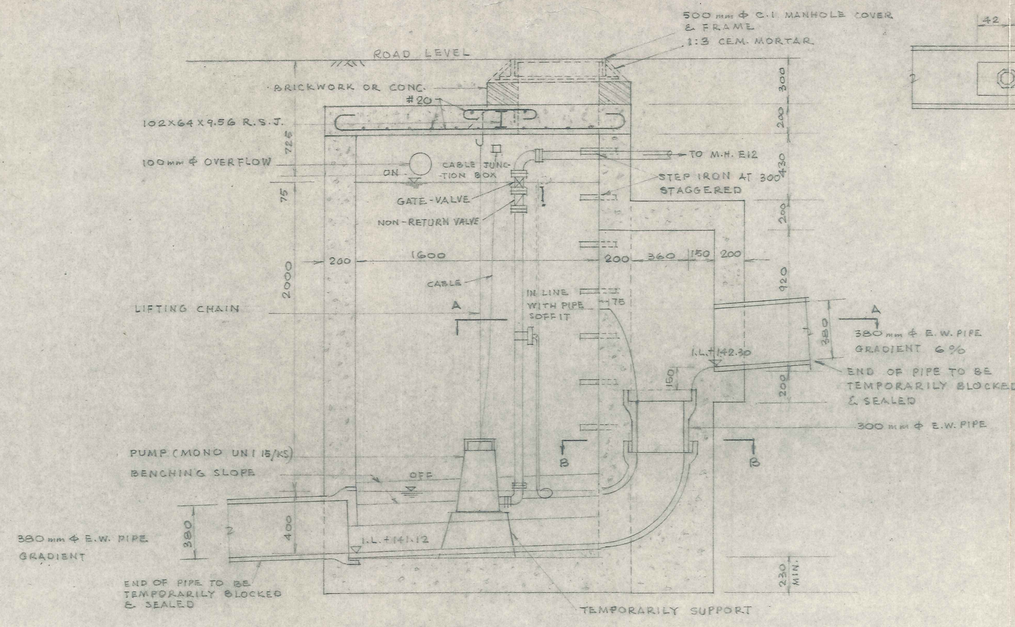
DUFFILL WATTS & KING LTD
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Dunedin P.O. Box 5269 Ph. 77-133 Invercargill P.O. Box 576 Ph. 83049
Balclutha P.O. Box 220 Phone 1425

ALEXANDRA BOROUGH COUNCIL

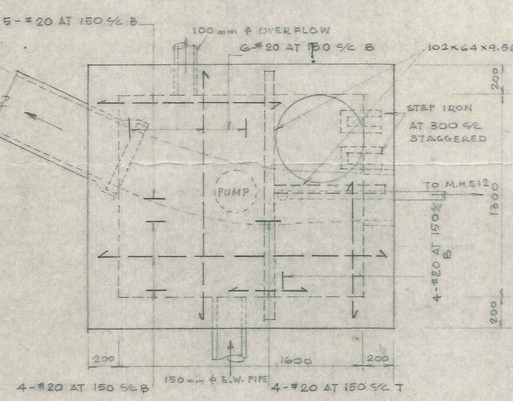
EXTENSIONS TO TRUNK SERVICES SEWERAGE RETICULATION

AMENDMENTS					NAME	DATE
NO.	BY	DATE		Appvd.	Surveyed	
					Drawn	
					Calculations R.CROSBIE	6.78
					Traced	
					Checked	
					Approved	

JOB NO. 8693
Sheet No 6 of shts
File L.B. F.B.



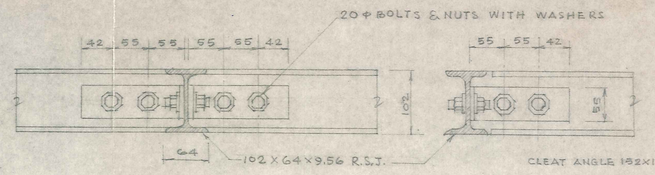
LONGITUDINAL SECTION



PLAN

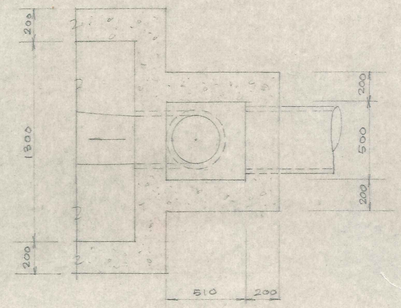
DETAILS OF MANHOLE A.M.H.

(SCALE 1:20)

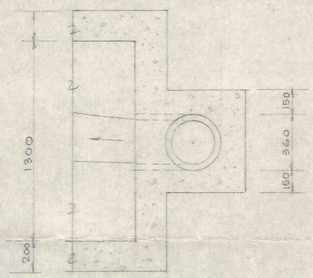


TYPICAL CONNECTION OF R.S.J.

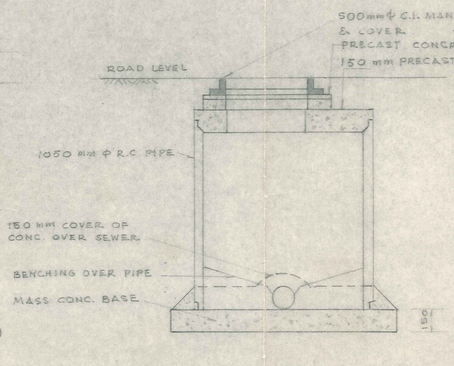
(SCALE 1:20)



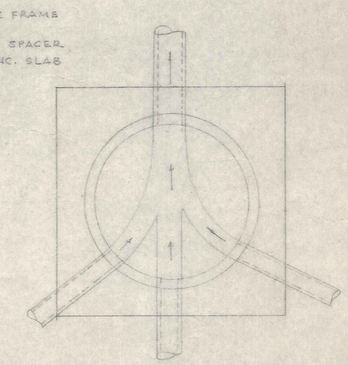
SECTION A-A



SECTION B-B



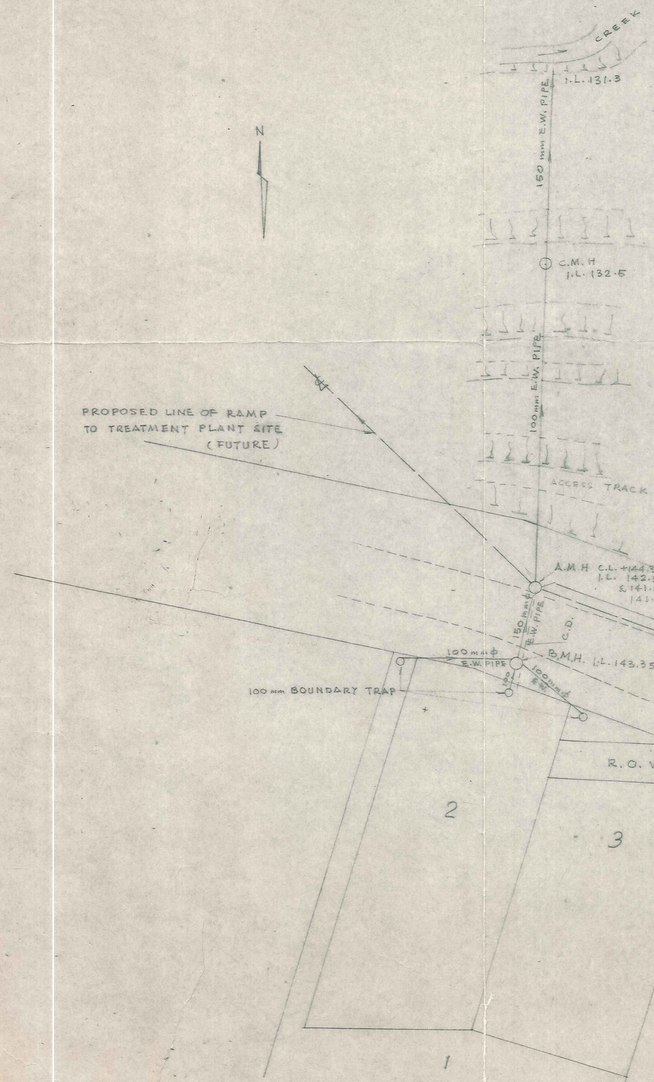
ELEVATION



PLAN

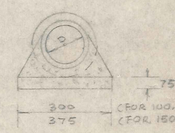
DETAILS OF MANHOLE B.M.H. (C.M.H. SIMILAR)

(SCALE 1:20)



LAYOUT PLAN

(SCALE 1:400)



DETAILS OF HAUNCHING

307

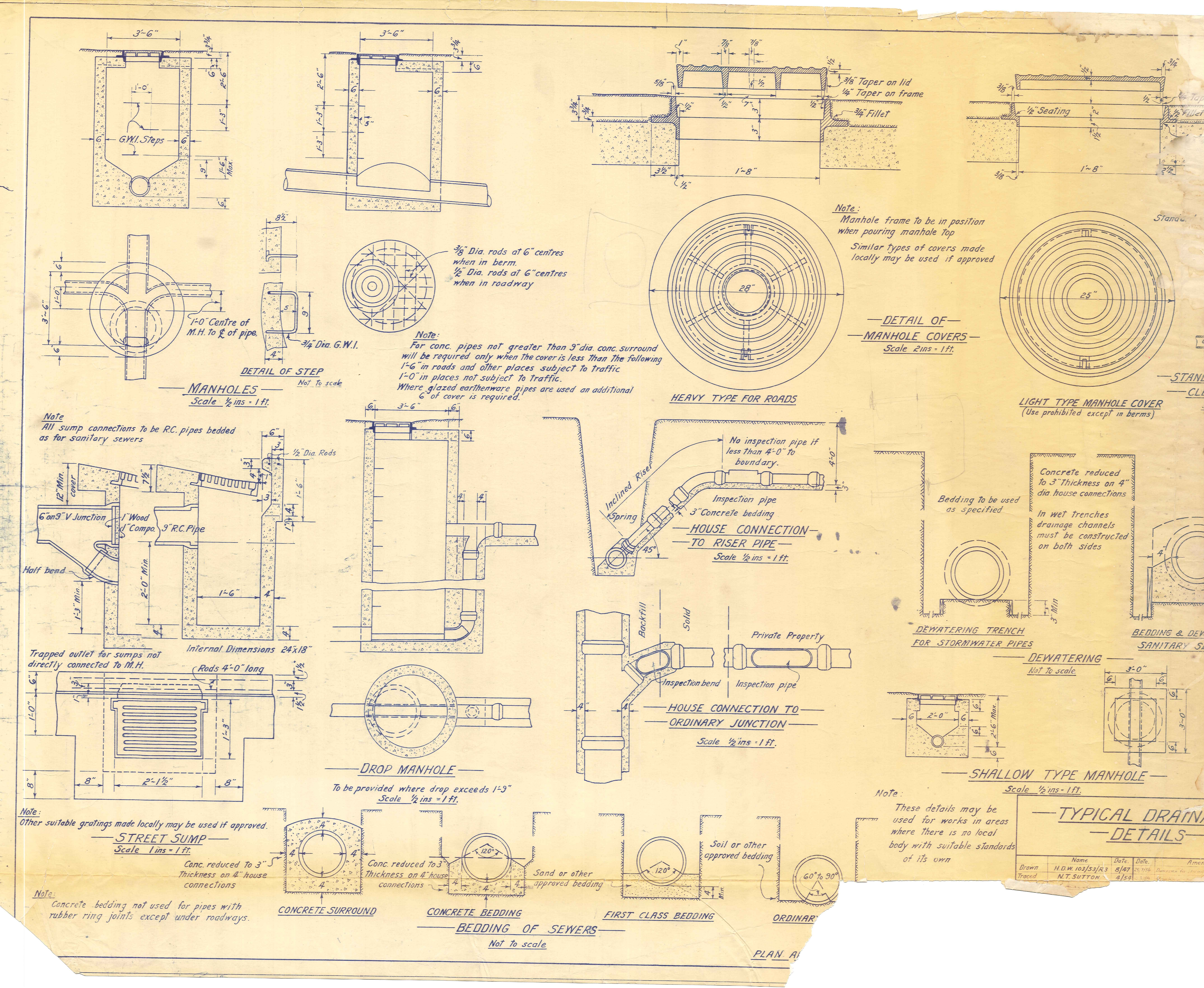
ORIGINAL SIZE mm INCHES

DUFFILL WATTS & KING LTD CONSULTING CIVIL & STRUCTURAL ENGINEERS Dunedin P.O. Box 5269 Ph. 77-123 Invercargill P.O. Box 576 Ph. 83049 Balclutha P.O. Box 220 Phone 1425 Cromwell P.O. Box 82 Phone 96	McGEORGE & ELDER SURVEYORS	PROPOSED SEWERAGE DISPOSAL ROSS SUBDIVISION ALEXANDRA

AMENDMENTS				
NO.	BY	DATE		Appvd.

NAME		DATE
Surveyed		
Drawn	W.S Yorn	4-6-1976
Calculations		
Traced		
Checked		
Approved		

JOB NO.	Sheet No
8373	of shts
File 19/317 L.B.	F.B.



G.W.I. Steps
1'-0" Centre of M.H. to ℄ of pipe.
MANHOLES
Scale ½ ins = 1 ft.
DETAIL OF STEP
Not to scale
¾" Dia. G.W.I.
3/8" Dia. rods at 6" centres when in berm.
½" Dia. rods at 6" centres when in roadway
Note:
For conc. pipes not greater than 9" dia. conc. surround will be required only when the cover is less than the following
1'-6" in roads and other places subject to traffic
1'-0" in places not subject to traffic.
Where glazed earthenware pipes are used an additional 6" of cover is required.
3/8" Taper on lid
¼" Taper on frame
¾" Fillet
½" Seating
Note:
Manhole frame to be in position when pouring manhole top
Similar types of covers made locally may be used if approved
HEAVY TYPE FOR ROADS
DETAIL OF MANHOLE COVERS
Scale 2ins = 1ft.
LIGHT TYPE MANHOLE COVER
(Use prohibited except in berms)
Note
All sump connections to be R.C. pipes bedded as for sanitary sewers
½" Dia. Rods
12" Min. cover
6" on 9" V Junction
1" Wood
1" Compo.
9" R.C. Pipe
Half bend
Internal Dimensions 24"x18"
Trapped outlet for sumps not directly connected to M.H.
Rods 4'-0" long
Note:
Other suitable gratings made locally may be used if approved.
STREET SUMP
Scale 1 ins = 1 ft.
DROP MANHOLE
To be provided where drop exceeds 1'-9"
Scale ½ ins = 1 ft.
No inspection pipe if less than 4'-0" to boundary.
Inclined Riser
Spring
Inspection pipe
3" Concrete bedding
HOUSE CONNECTION TO RISER PIPE
Scale ½ ins = 1 ft.
Backfill
Solid
Private Property
Inspection bend
Inspection pipe
HOUSE CONNECTION TO ORDINARY JUNCTION
Scale ½ ins = 1 ft.
Bedding to be used as specified
Concrete reduced to 3" Thickness on 4" dia house connections
In wet trenches drainage channels must be constructed on both sides
DEWATERING TRENCH FOR STORMWATER PIPES
BEDDING & DEW...
SANITARY S...
DEWATERING
Not to scale
SHALLOW TYPE MANHOLE
Scale ½ ins = 1 ft.
Note:
These details may be used for works in areas where there is no local body with suitable standards of its own
TYPICAL DRAINA...
DETAILS
Drawn H.D.W. 103/53/R3 8/47
Traced N.T. SUTTON 4/54
Conc. reduced to 3" Thickness on 4" house connections
Sand or other approved bedding
Soil or other approved bedding
Note:
Concrete bedding not used for pipes with rubber ring joints except under roadways.
CONCRETE SURROUND
CONCRETE BEDDING
FIRST CLASS BEDDING
ORDINARY...
BEDDING OF SEWERS
Not to scale
PLAN A...