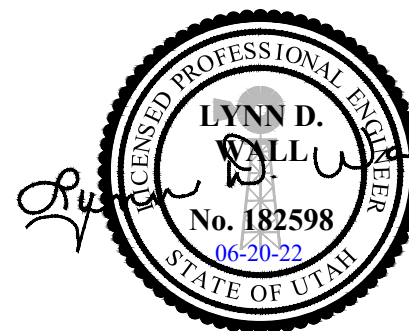


**STA 100+20
STORM DRAIN VAULT**
SCALE: NONE

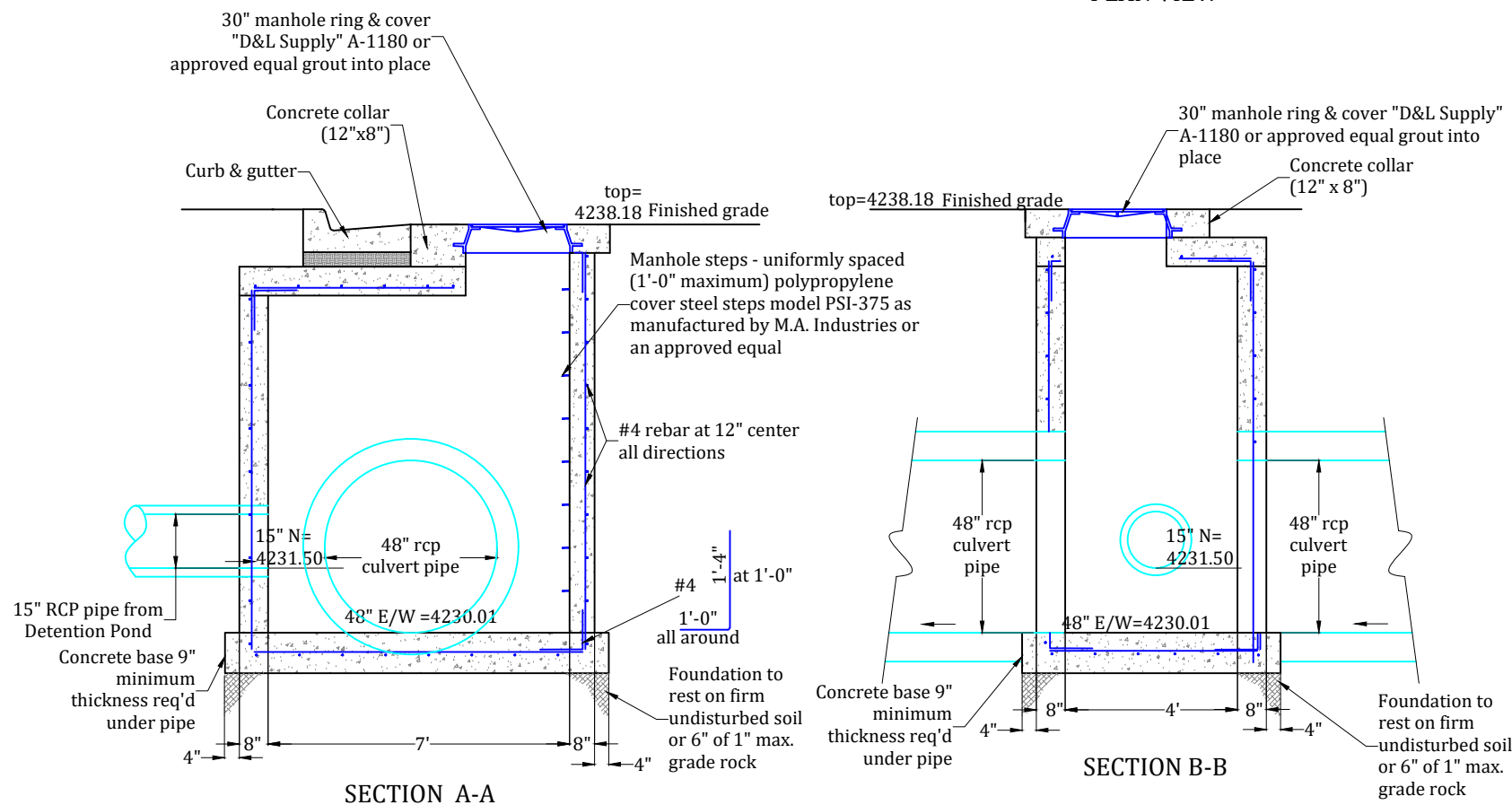
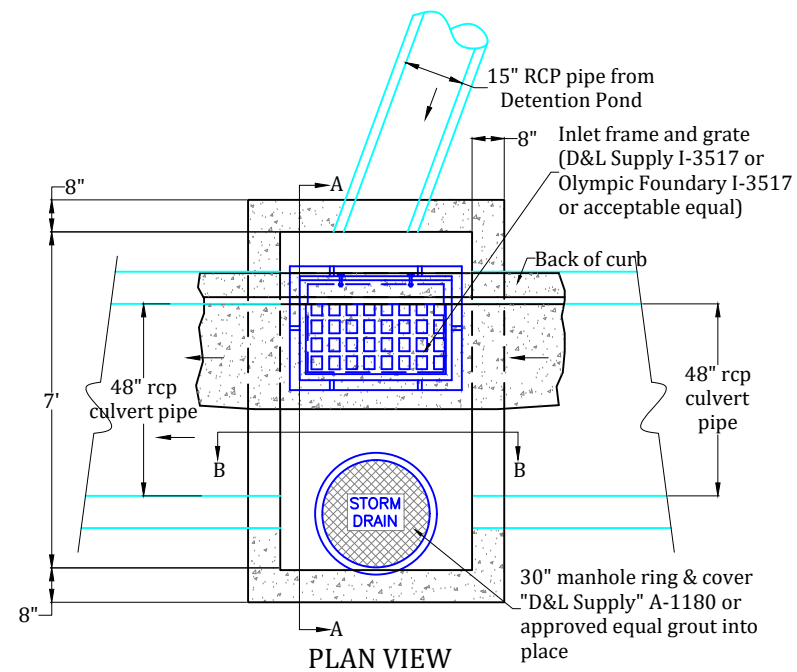
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Developer:
Pat Burns
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801-710-2234

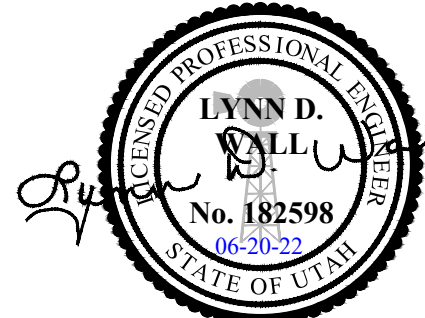
Approved for Construction
Weber County Engineer
Date: _____

Project: IMPROVEMENTS STAGECOACH ESTATES WEBER COUNTY, UTAH		Prepared By: Summers Engineering Collective - Jen Summers - Summers.eng.collective@gmail.com	
Title: DETAILS: STA 100+20 STORM DRAIN VAULT		#	Date: Revision:
Date: 20 JUNE 2022	Sheet 20.0		



**STA 103+50
STORM DRAIN VAULT**
SCALE: NONE

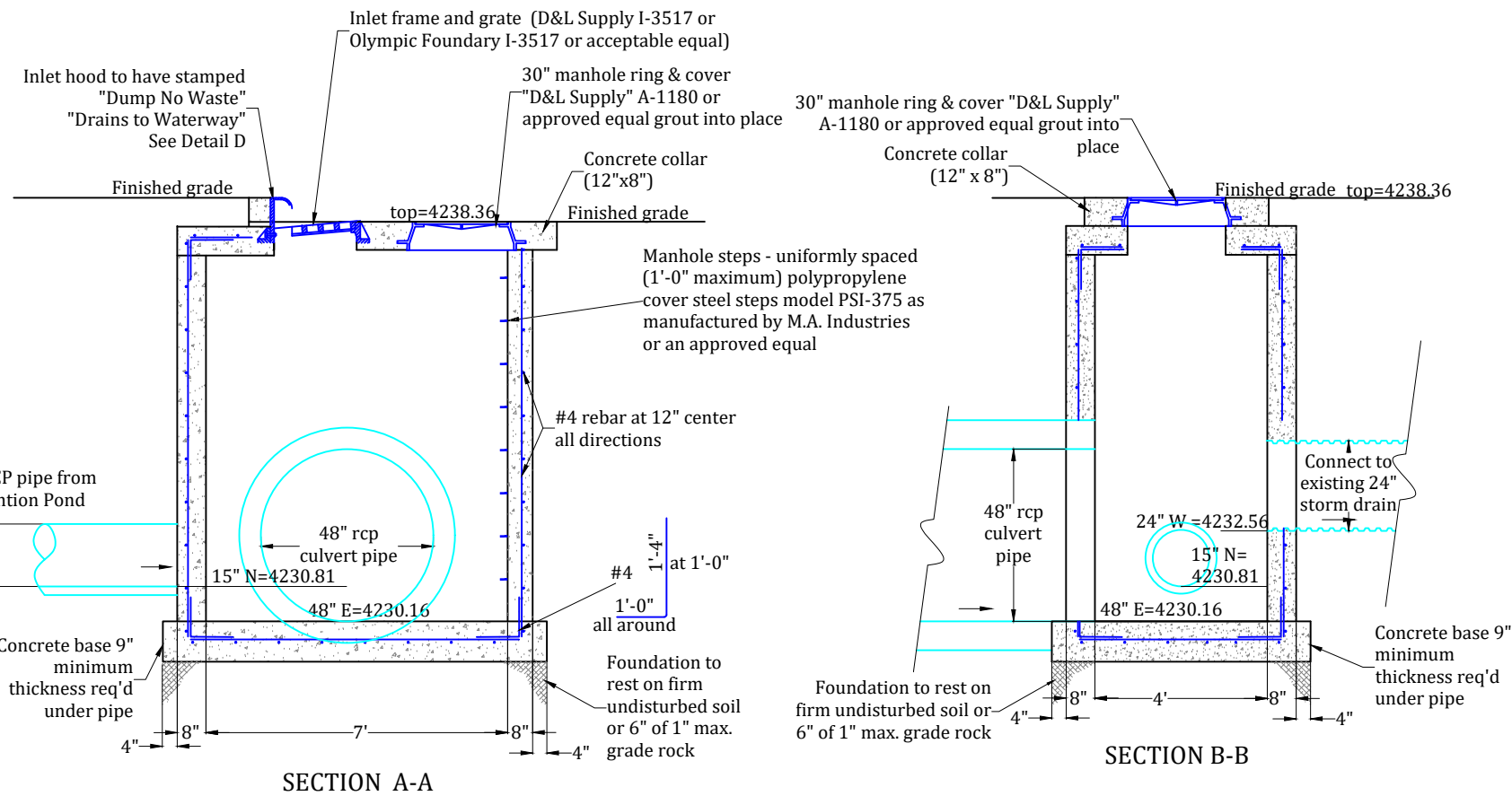
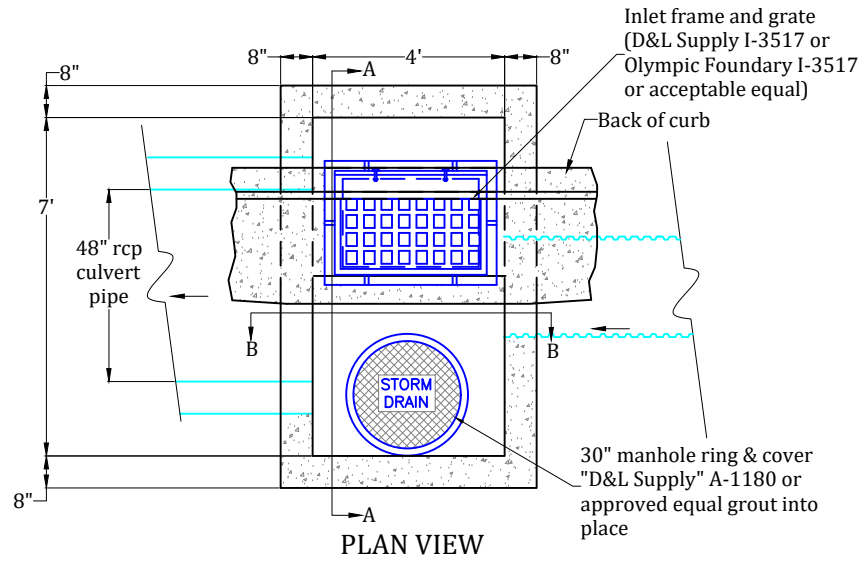
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Developer:
Pat Burns
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801-710-2234

Approved for Construction
Weber County Engineer
Date: _____

Project: IMPROVEMENTS STAGECOACH ESTATES WEBER COUNTY, UTAH		Prepared By: Summers Engineering Collective - Jen Summers - Summers.eng.collective@gmail.com	
Title: DETAILS: STA 103+50 STORM DRAIN VAULT		#	Date: Revision:
Date: 20 JUNE 2022	Sheet 20.1		

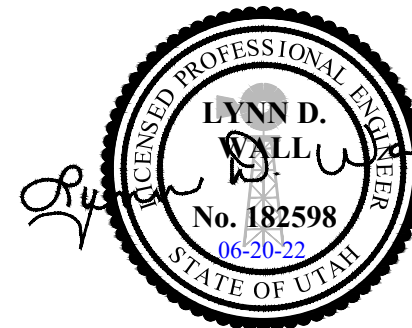


**STA 113+17
STORM DRAIN VAULT**
SCALE: NONE

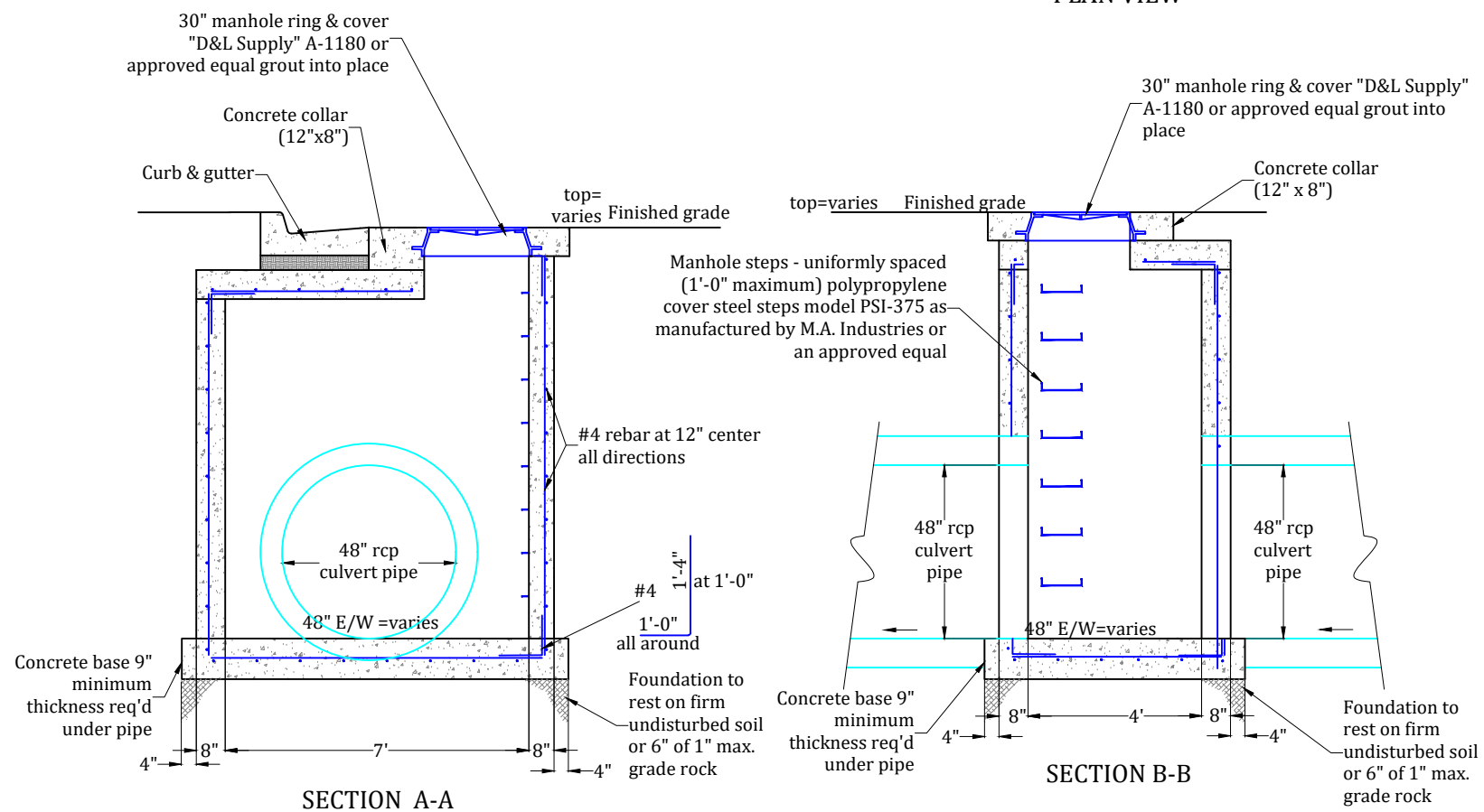
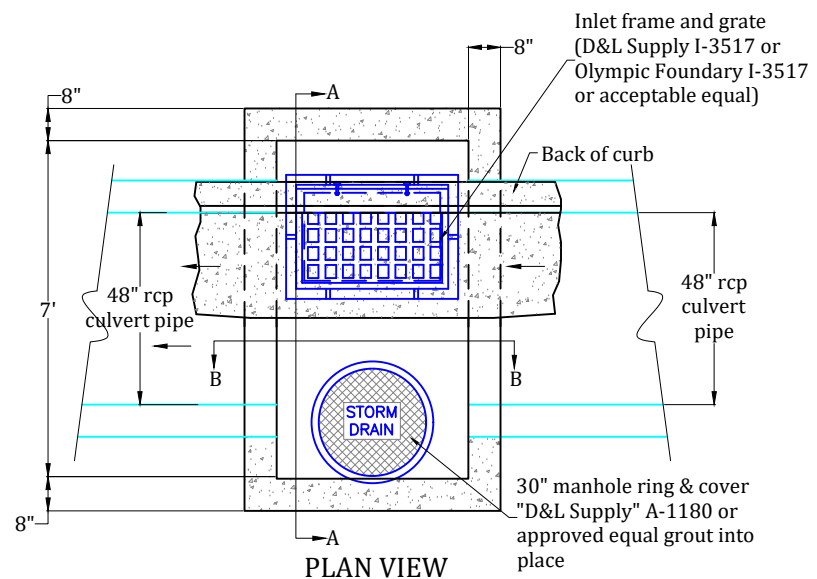
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Developer:
Pat Burns
Lync Construction
801-710-2234

Approved for Construction
Weber County Engineer
Date: _____

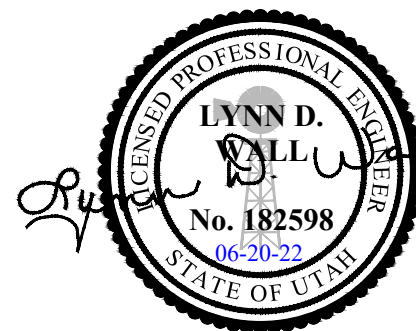


Project: IMPROVEMENTS STAGECOACH ESTATES WEBER COUNTY, UTAH		Prepared By: Summers Engineering Collective - Jen Summers - Summers.eng.collective@gmail.com	
Title: DETAILS: STA 113+17 STORM DRAIN VAULT		#	Date: Revision:
Date: 20 JUNE 2022	Sheet 20.2		



STA'S 106+57, 108+30 & 110+60
STORM DRAIN VAULT
 SCALE: NONE

1
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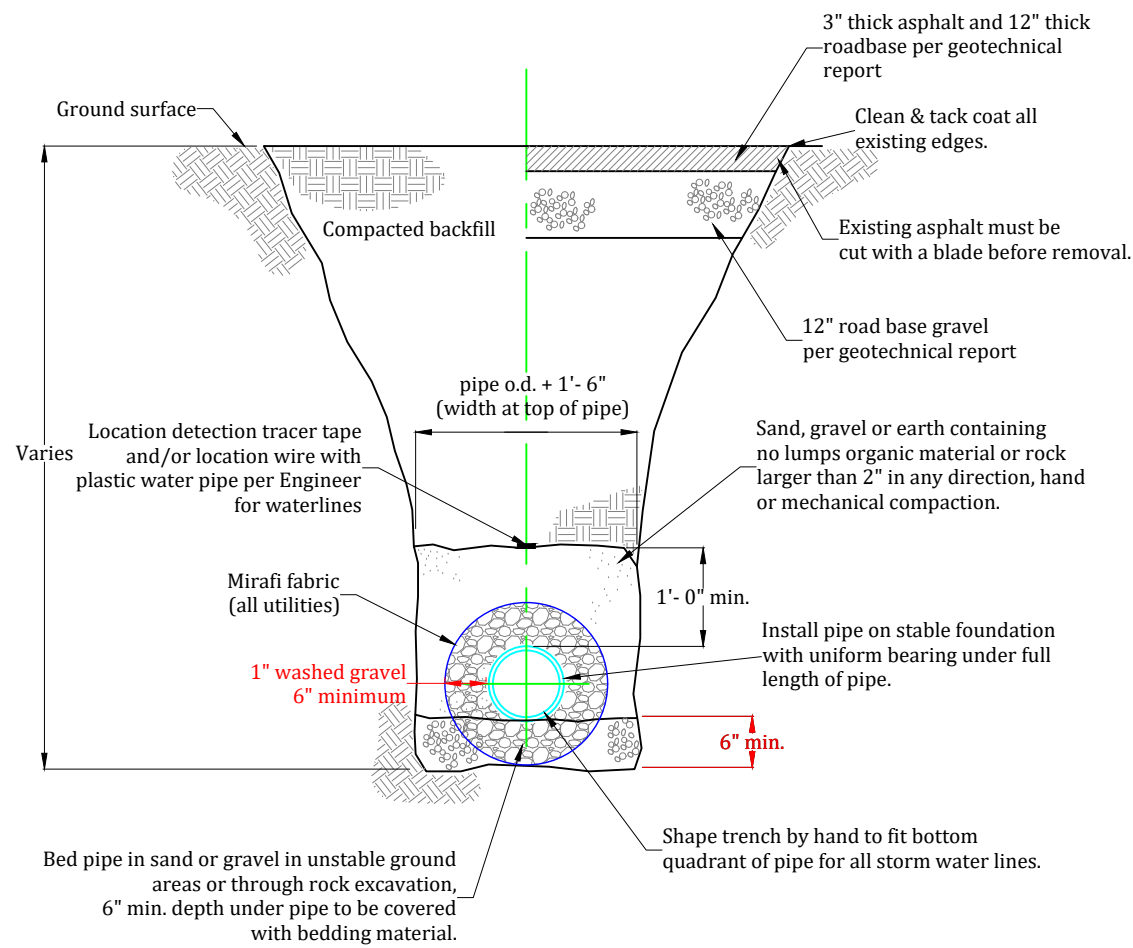


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 Pat Burns
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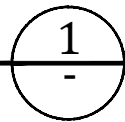
 Weber County Engineer
 Date: _____

Project: IMPROVEMENTS STAGECOACH ESTATES WEBER COUNTY, UTAH		Prepared By: Summers Engineering Collective - Jen Summers - Summers.eng.collective@gmail.com	
Title: DETAILS: STA'S 106+57, 108+30 & 110+60 STORM DRAIN VAULT		#	Date: Revision:
Date: 20 JUNE 2022	Sheet 20.3		



STANDARD TRENCH CROSS-SECTION

SCALE: NONE



All utility trenching within road right-of-ways which are 66' wide or wider shall have backfill material per geotechnical report.

Safe bearing loads	
Soil type	Safe bearing load (lb/ft ²)
Sand	1000
Sand & gravel	1500
Sand & gravel cemented with clay	2000
Shale	5000

Thrust block area against trench wall (square feet)	=	Thrust on / fitting	Safe bearing load of soil
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SPECIAL UTILITY NOTE:
 ALL PIPES (CULINARY WATER, SECONDARY WATER, SANITARY SEWER, LAND DRAIN AND STORM DRAIN) MUST BE WRAPPED IN MIRAFI FABRIC AND MUST HAVE ALL SIDES 6" THICK OF 1" WASHED GRAVEL
 The Geotechnical Report provided by: CMT Engineering Laboratories (Project No. 10878, Dated March 7, 2018) has critical information in regards to this project and must be followed.

SANITARY SEWER TRENCH NOTES:

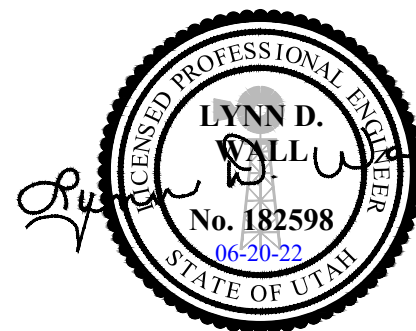
- The Contractor shall be responsible for meeting all current OSHA and UOSH requirements for trench safety.
- Contractor shall locate all underground utilities before laying pipe within 200' of said utilities which may be exposed, damaged or crossed as shown on the drawings or as "blue staked" the Contractor will make arrangements with the utility company to move the utility if necessary or obtain permission from the project engineer to modify grade of pipeline in order to go around utilities.
- The Contractor shall determine the actual location of existing service connections and utilities and take the necessary steps to avoid them. The Contractor is responsible for any damage occurring during construction.
- Testing: All new sanitary sewers to be cleaned, "videotaped", and necessary repairs made before acceptance. All lines shall be pressure tested to 3.5 psi min. for 5 minutes. A mandrel or ball can be used to verify deformation of a pipe as determined from the videotape unless specified otherwise.
- All measurements are in English units.
- All sewer lines to be installed in roadway.
- All sewer lines to be installed at a minimum 10' distance from any water lines.
- All sewer lines to be installed with a minimum of 4' cover to the top of the pipe.

STORM DRAIN TRENCH NOTES:

- The Contractor shall be responsible for meeting all current OSHA and UOSH requirements for trench safety.
- Contractor shall locate all underground utilities before laying pipe within 50' of said utilities which may be exposed, damaged or crossed as shown on the drawings or as "blue staked" the contractor will make arrangements with the utility company to move the utility if necessary or obtain permission from the Project Engineer to modify grade of pipeline in order to go around utilities.
- Testing: All new storm drain systems to be cleaned, "videotaped", and necessary repairs made before acceptance. All lines shall be pressure tested to 3.5 psi (min.) for 5 minutes. A mandrel or ball can be used to verify deformation of a pipe as determined from the videotape.
- All storm drain lines to be installed in roadway or under curb and gutter with approval by Weber County engineer.
- Minimum pipe size for storm drain pipe is 15" diameter and must be concrete.

CULINARY WATER TRENCH NOTES:

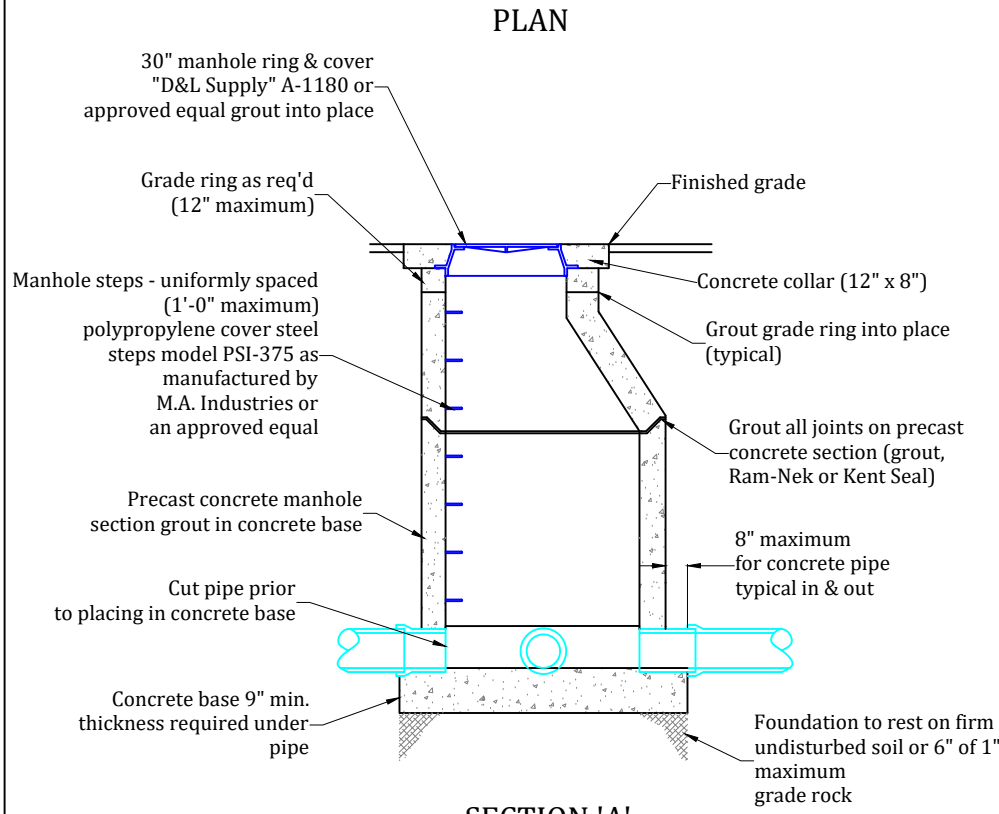
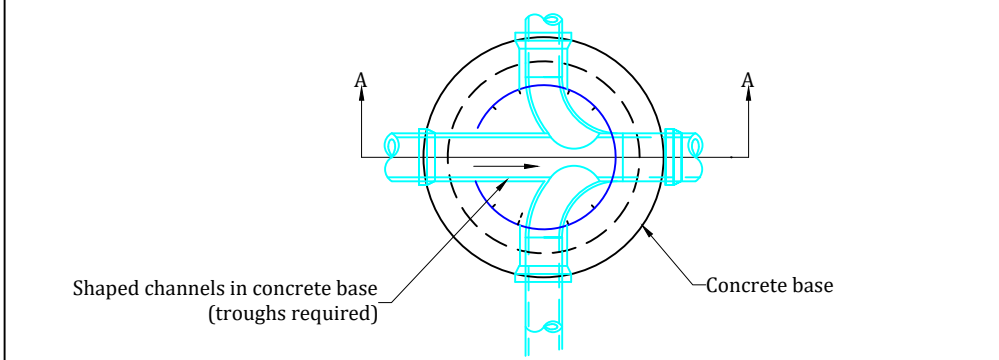
- Waterlines 12 inches and larger shall be ductile iron Class-51. Waterlines 10-inches and smaller shall be PVC C-900 DR-18 or ductile iron Class-51.
- All waterlines shall be 8" minimum.
- Valves larger than 12 inches shall be butterfly valves with boxes.
- Ductile iron pipe and fittings shall be wrapped with polyethylene and have cathodic protection where required.
- Whenever possible "hot tap" connections required. Hot tap valve to be supported during connection. Contractor to notify City 24 hours in advance of making connection.
- Contractor shall contact property owners 24 hours in advance with written notice for shutting off water.
- Pipe zone shall be backfilled with sand or material as approved by Weber County Engineer.
- Concrete collars shall be placed around all valves.
- The following tests must be passed before the waterline is connected for service:
 - Pressure Test - Must keep a minimum of 200 PSI for 2 hours
 - Chlorination Test - Must keep a minimum of 30 PPM for 24 hours.
 - Clear Water Test
 - Bacteria Test - A minimum of 2 tests are required.
- All mechanical joint restraint (e.g. megalug) connections, flange fittings and all other fittings using connection bolts must be furnished and installed with bluebolts.
- All sewer lines to be installed with a minimum of 4' cover to the top of the pipe.



Project: IMPROVEMENTS STAGECOACH ESTATES WEBER COUNTY, UTAH	Prepared By: Summers Engineering Collective - Jen Summers - Summers.eng.collective@gmail.com
Title: DETAILS: TRENCHING	# Date: Revision:
Date: 20 JUNE 2022	Sheet 20.4

Developer:
 Pat Burns
 Lync Construction
 801-710-2234

Approved for Construction
 Weber County Engineer
 Date: _____

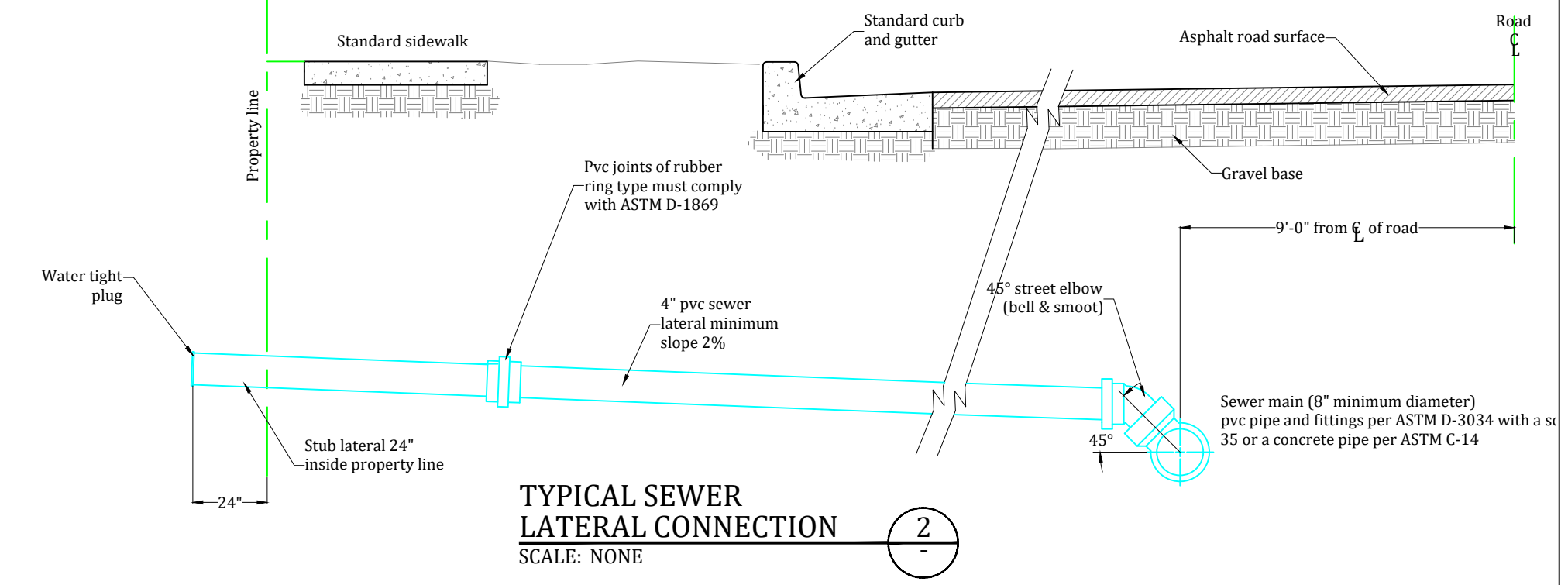


- NOTES:**
1. Cast in place manhole shown. A precast reinforced manhole is acceptable.
 2. Expansion water tight boot to be installed for pipe connections with all precast reinforced manholes.

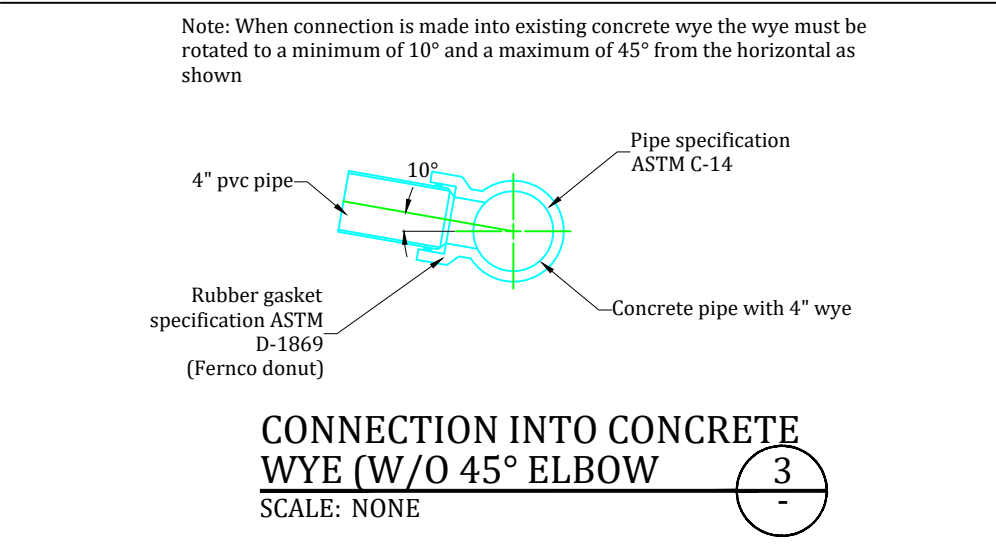
STANDARD SANITARY SEWER MANHOLE
SCALE: NONE 1

Developer:
Pat Burns
Lync Construction
801-710-2234

Approved for Construction
Weber County Engineer
Date: _____

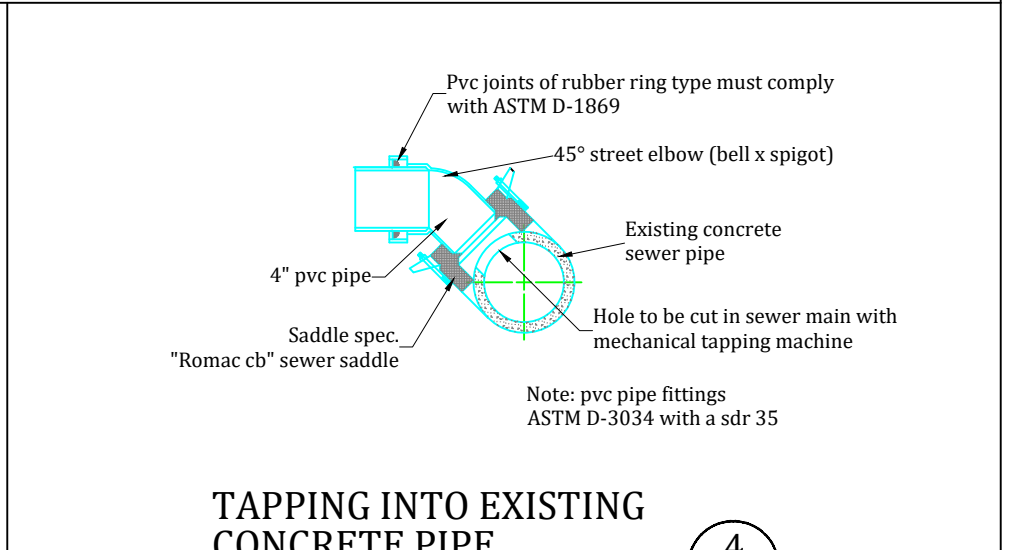


TYPICAL SEWER LATERAL CONNECTION
SCALE: NONE 2



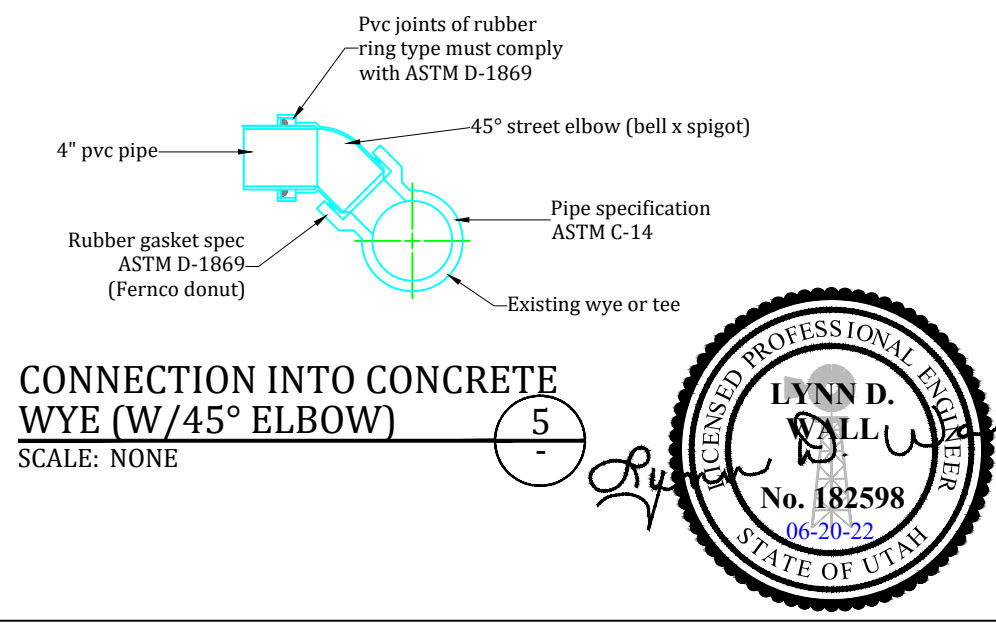
Note: When connection is made into existing concrete wye the wye must be rotated to a minimum of 10° and a maximum of 45° from the horizontal as shown

CONNECTION INTO CONCRETE WYE (W/O 45° ELBOW)
SCALE: NONE 3

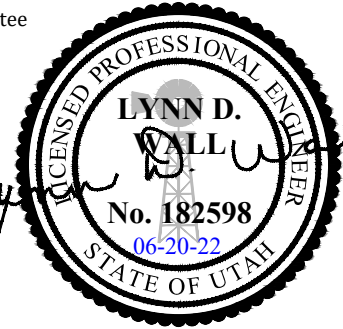


Note: pvc pipe fittings ASTM D-3034 with a sdr 35

TAPPING INTO EXISTING CONCRETE PIPE
SCALE: NONE 4



CONNECTION INTO CONCRETE WYE (W/45° ELBOW)
SCALE: NONE 5



Project: IMPROVEMENTS STAGECOACH ESTATES WEBER COUNTY, UTAH		Prepared By: Summers Engineering Collective - Jen Summers - Summers.eng.collective@gmail.com	
Title: DETAILS: CULINARY WATER		#	Date:
Date: 20 JUNE 2022	Sheet 20.5	Revision:	