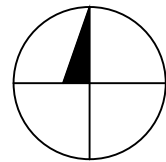
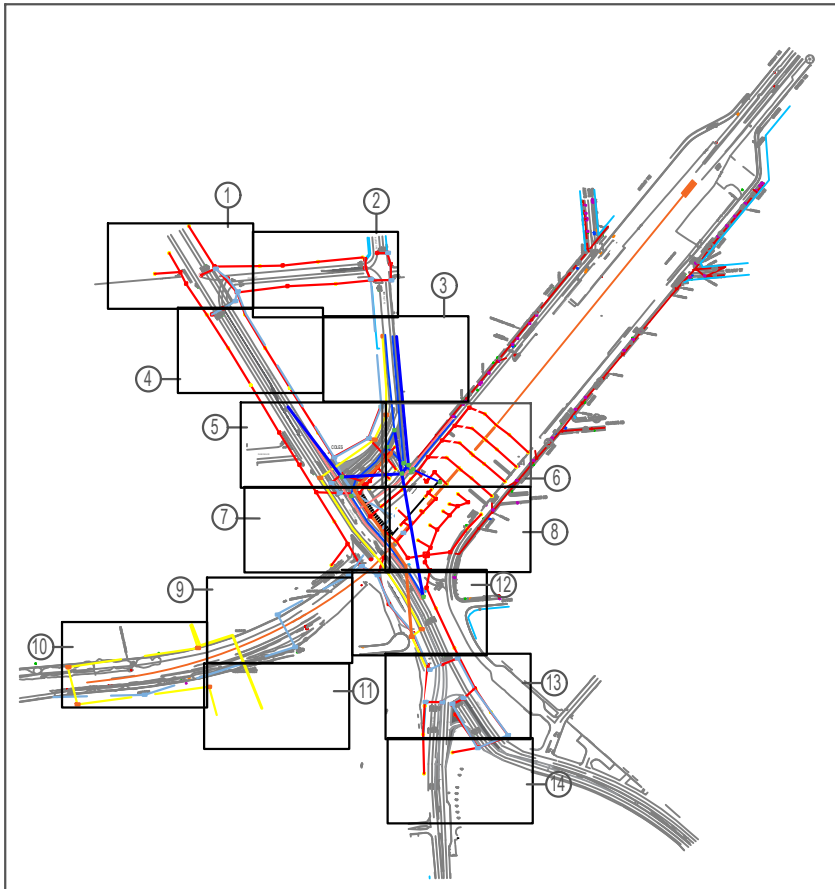


# SERVICES DEPARTMENT

## PACKAGE ONE: SERVICES ALIGNMENT

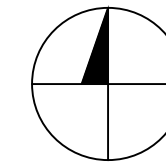
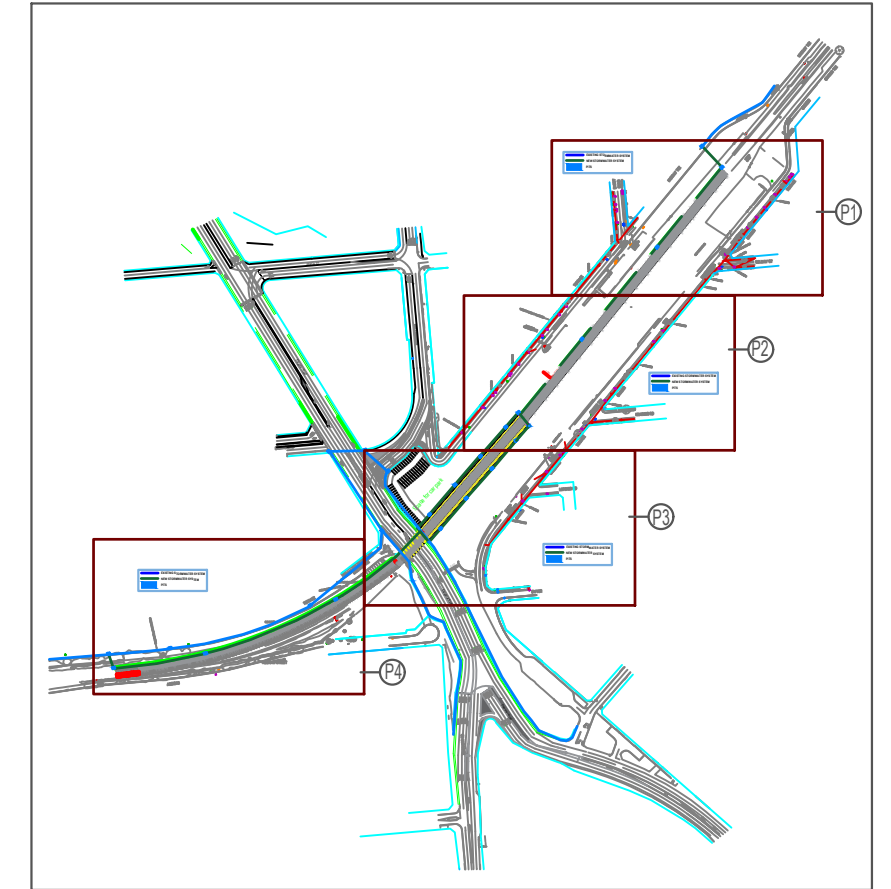


SERVICES ALIGNMENT

SCALE: 1:200000

DRAWING NUMBER	NAME OF DRAWING	DRAWN BY
<u>PACKAGE ONE: SERVICES ALIGNMENT</u>		
001	COVER	T. PENJOR
002	PRUNUS - EGMONT ST. INTERSECTION	MARC VIECELI
003	MORPHETT - PRUNUS ST. INTERSECTION	MARC VIECELI
004	MORPHETT ROAD NORTH OF MORPHETT - DIAGONAL INTERSECTION	MARC VIECELI
005	PRUNUS ST. INTERSECTION SOUTH	MARC VIECELI
006	MORPHETT - DIAGONAL ROAD INTERSECTION NORTH	MARC VIECELI
007	MORPHETT - DIAGONAL RD INTERSECTION EAST, UNDERBRIDGE	MARC VIECELI
008	DIAGONAL - MORPHETT RD INTERSECTION WEST	MARC VIECELI
009	DIAGONAL - MORPHETT RD INTERSECTION SOUTH	MARC VIECELI
010	OVERPASS WEST	MARC VIECELI
011	OVERPASS WEST PROJECT END	MARC VIECELI
012	OVERPASS SOUTHWEST PROJECT END	MARC VIECELI
013	DIAGONAL - MORPHETT RD SOUTH - DWYER STREET	MARC VIECELI
014	MORPHETT - DIAGONAL RD FORK SOUTH	MARC VIECELI
<u>PACKAGE TWO: STORM WATER SYSTEM &amp; PLATFORM</u>		
015	STORMWATER NORTHERN EXTENT - BARRY ROAD	LINGZI Z
016	STORMWATER NORTH - KEARNES ROAD	LINGZI Z
017	STORMWATER - PLATFORM & OVERPASS	LINGZI Z
018	STORMWATER - SOUTHERN PROJECT EXTENT	LINGZI Z
019	PLATFORM	DENIS C
020	CONTROL ROOM	DENIS C
021	TYPICAL SECTION VIEW OF WATER, GAS & ELECTRICITY	JOEL EGEL
022	SERVICES TRENCH CROSS SECTION LAYOUT	AMRINDER

## PACKAGE TWO: STORM WATER SYSTEM



STORM WATER SYSTEM

SCALE: 1:200000












REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:

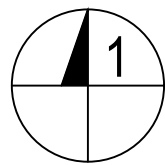


**PROJECT:**  
OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS

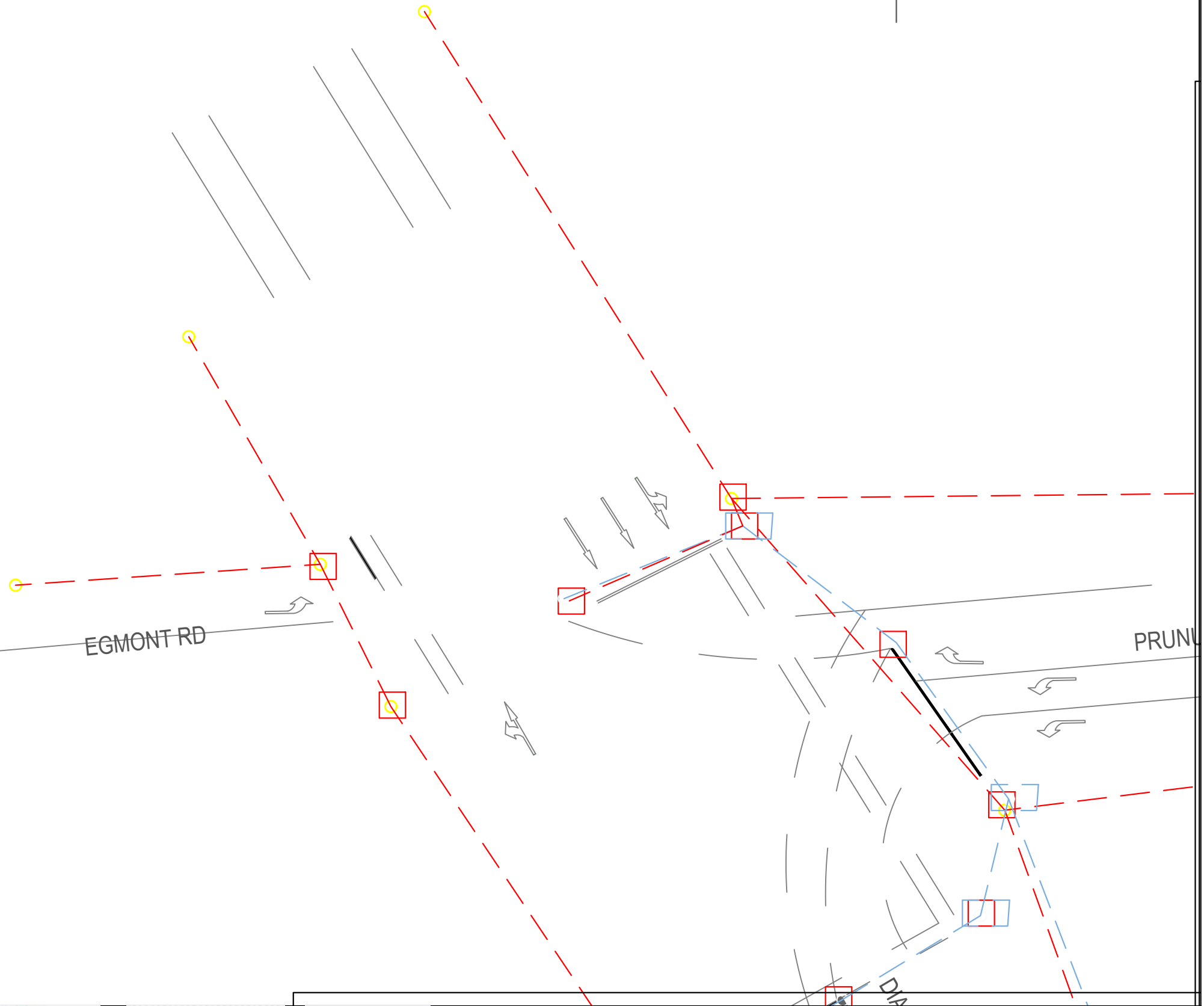
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VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 001	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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	DESIGN GAS
	EXISTING GAS
	DESIGN ELECTRICAL
	DESIGN COMMS
	EXISTING COMMS
	DESIGN TRAFFIC
	EXISTING WATER
	DESIGN WATER
	LIGHT POLE
	PIT LOCATION (ALL)
	TRAFFIC SIGNAL



PRUNUS - EGMONT ST. INTERSECTION  
SCALE: 1:10000



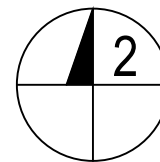
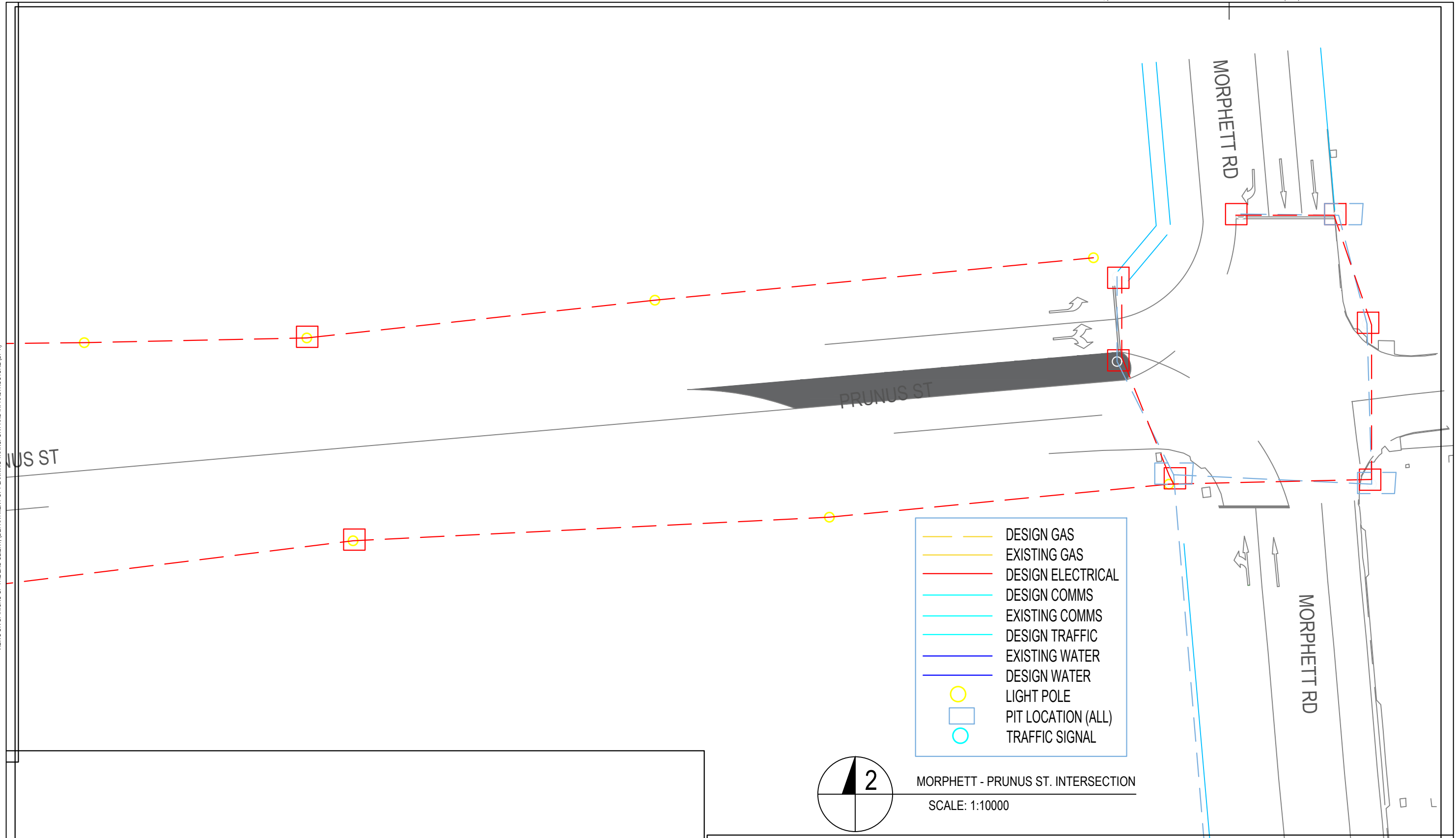
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**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: PRUNUS - EGMONT ST. INTERSECTION	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 002	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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MORPHETT - PRUNUS ST. INTERSECTION  
SCALE: 1:10000

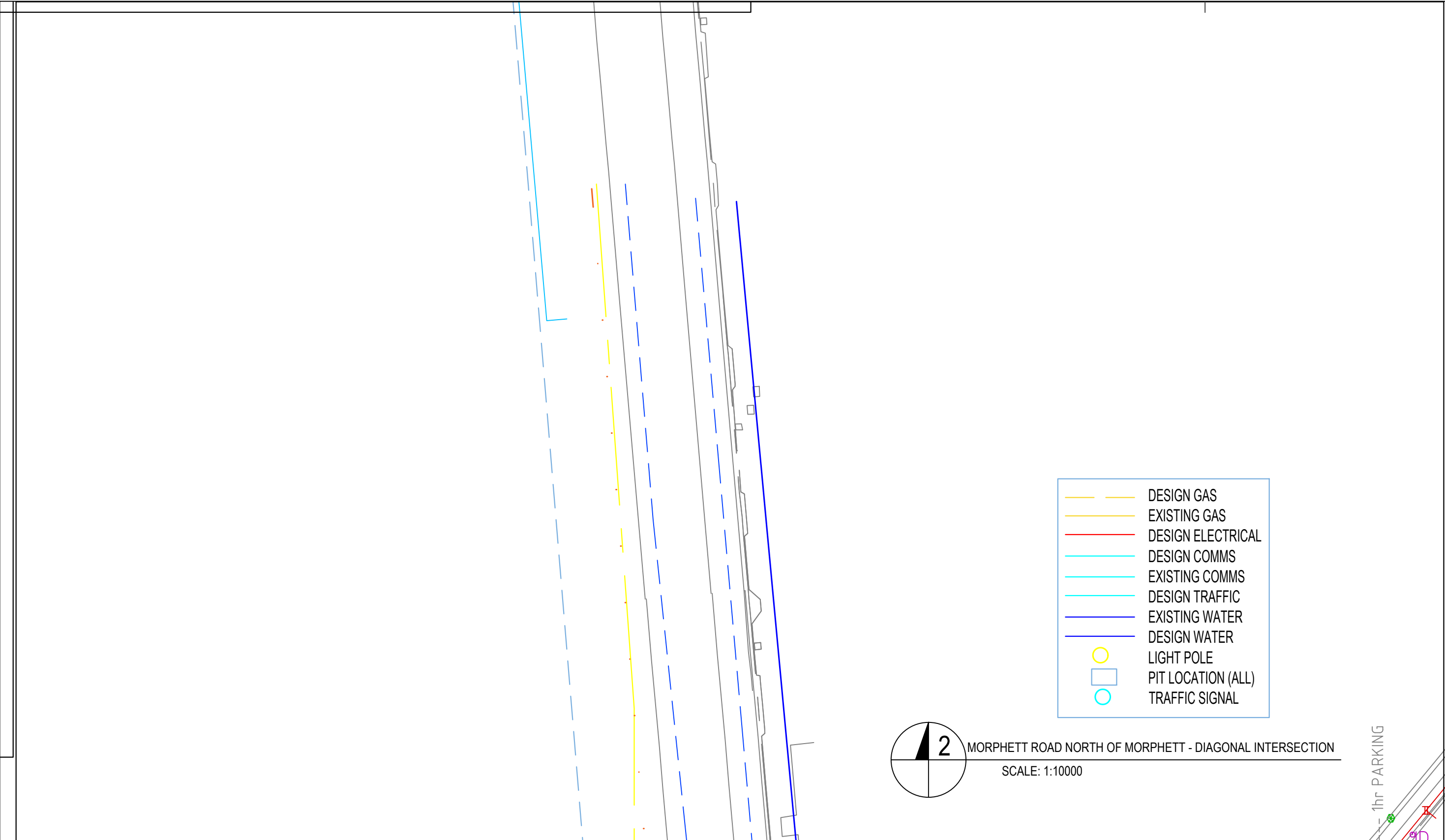
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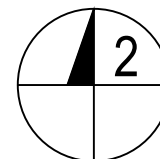
**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: MORPHETT - PRUNUS ST. INTERSECTION	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 003	REVISION:
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- DESIGN GAS
- EXISTING GAS
- DESIGN ELECTRICAL
- DESIGN COMMS
- EXISTING COMMS
- DESIGN TRAFFIC
- EXISTING WATER
- DESIGN WATER
- LIGHT POLE
- PIT LOCATION (ALL)
- TRAFFIC SIGNAL



MORPHETT ROAD NORTH OF MORPHETT - DIAGONAL INTERSECTION

SCALE: 1:10000

1hr PARKING

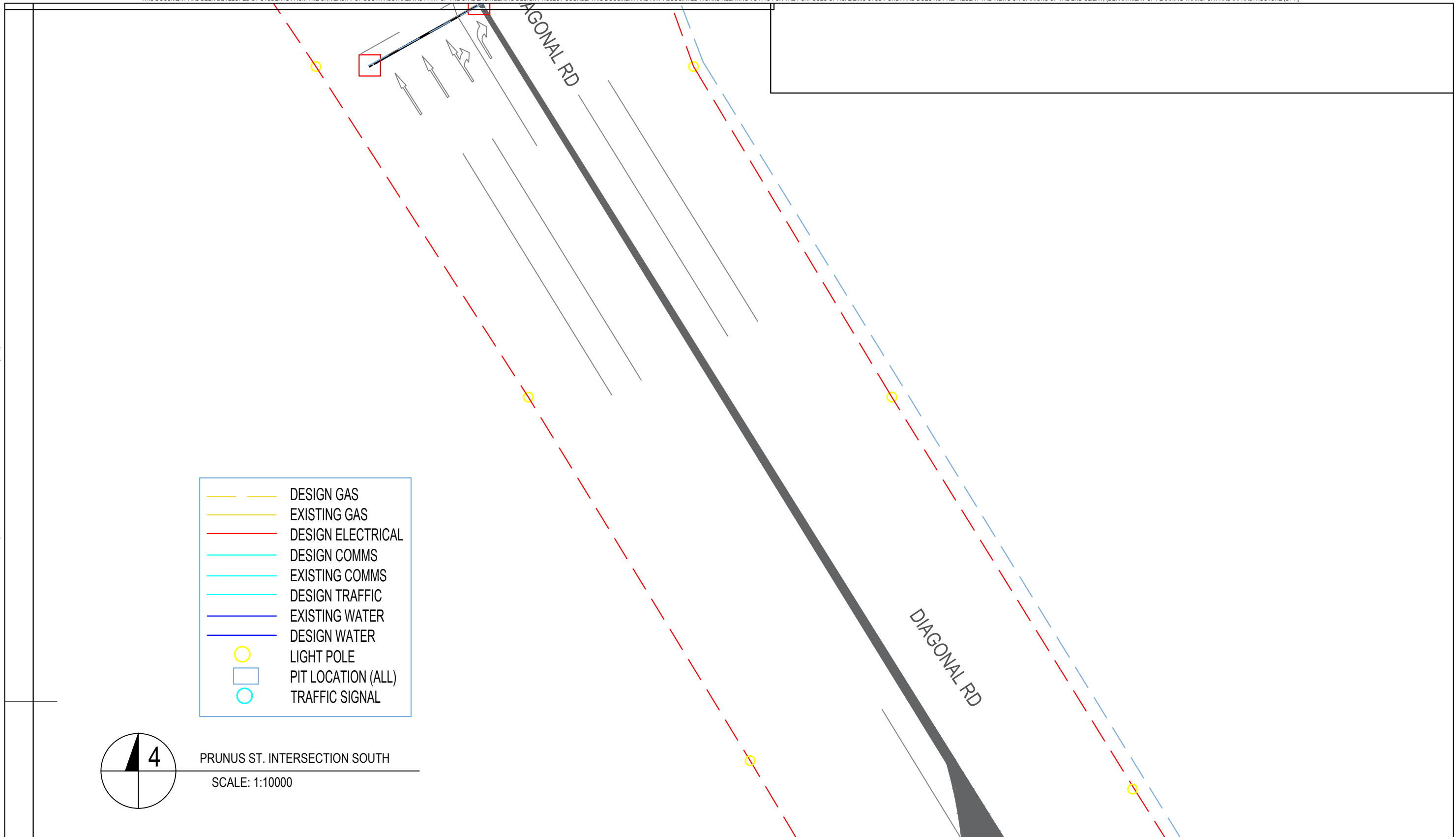
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**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: MORPHETT ROAD NORTH OF MORPHETT - DIAGONAL INTERSECTION	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 004	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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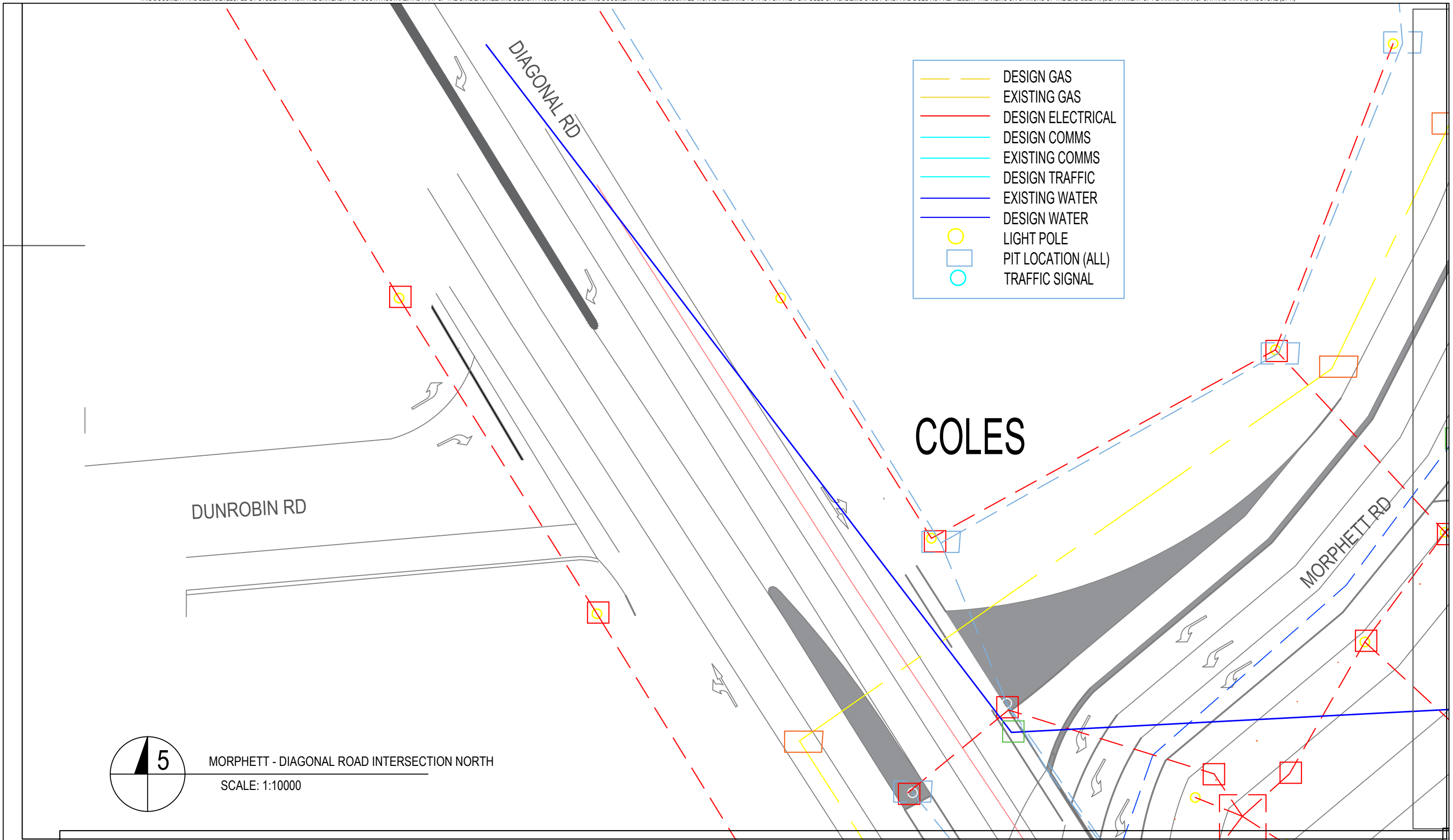
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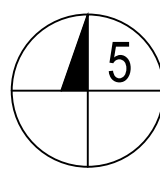
**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: PRUNUS ST. INTERSECTION SOUTH
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 005
APPROVED BY:	SIGNED:	DATE:	REVISION: AS SHOWN
			SCALE: AS SHOWN

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- DESIGN GAS
- EXISTING GAS
- DESIGN ELECTRICAL
- DESIGN COMMS
- EXISTING COMMS
- DESIGN TRAFFIC
- EXISTING WATER
- DESIGN WATER
- LIGHT POLE
- PIT LOCATION (ALL)
- TRAFFIC SIGNAL



MORPHETT - DIAGONAL ROAD INTERSECTION NORTH  
SCALE: 1:10000

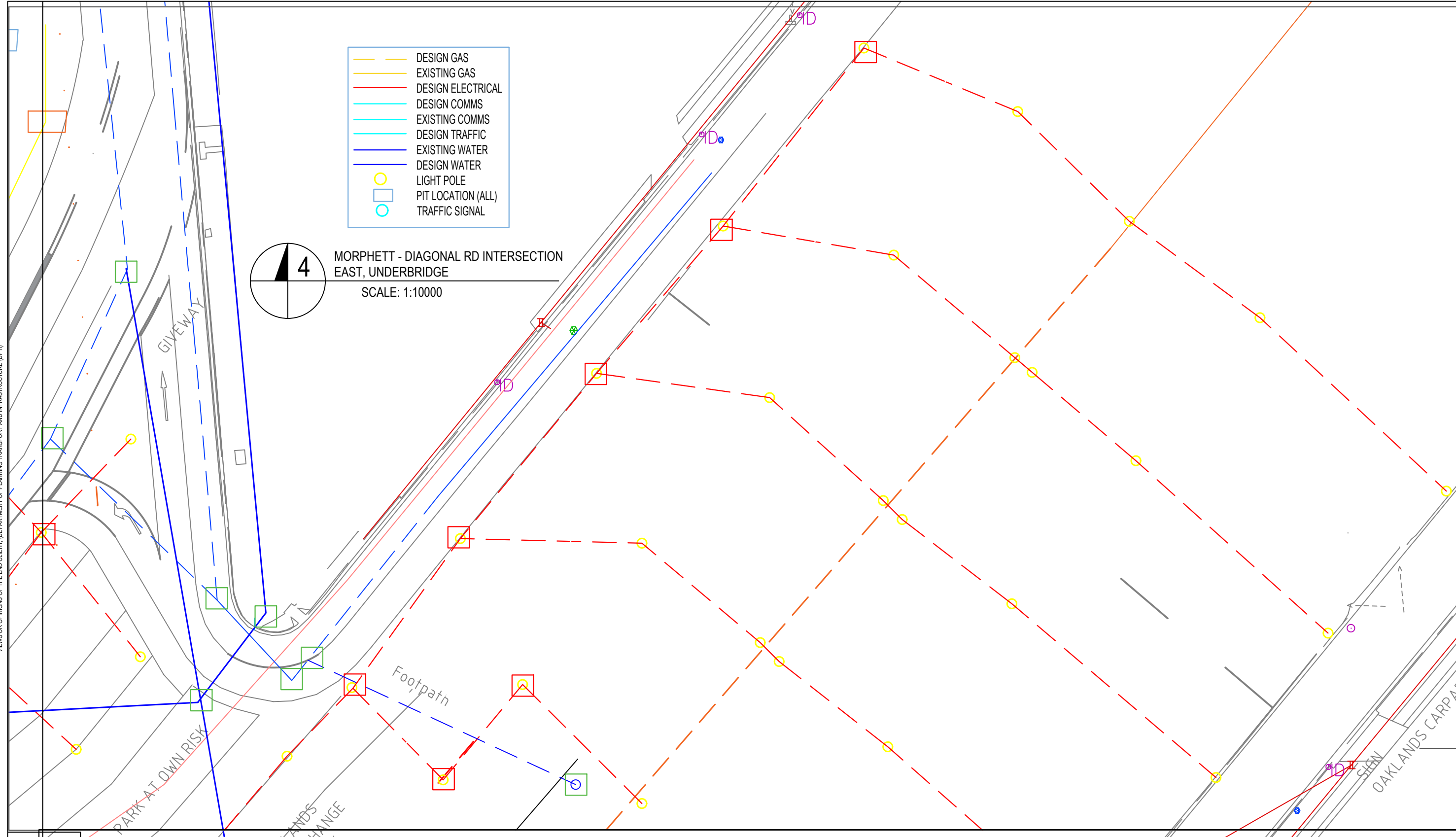
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**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: MORPHETT - DIAGONAL ROAD INTERSECTION NORTH	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 006	REVISION:
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- DESIGN GAS
- EXISTING GAS
- DESIGN ELECTRICAL
- DESIGN COMMS
- EXISTING COMMS
- DESIGN TRAFFIC
- EXISTING WATER
- DESIGN WATER
- LIGHT POLE
- PIT LOCATION (ALL)
- TRAFFIC SIGNAL

4 MORPHETT - DIAGONAL RD INTERSECTION  
EAST, UNDERBRIDGE  
SCALE: 1:10000

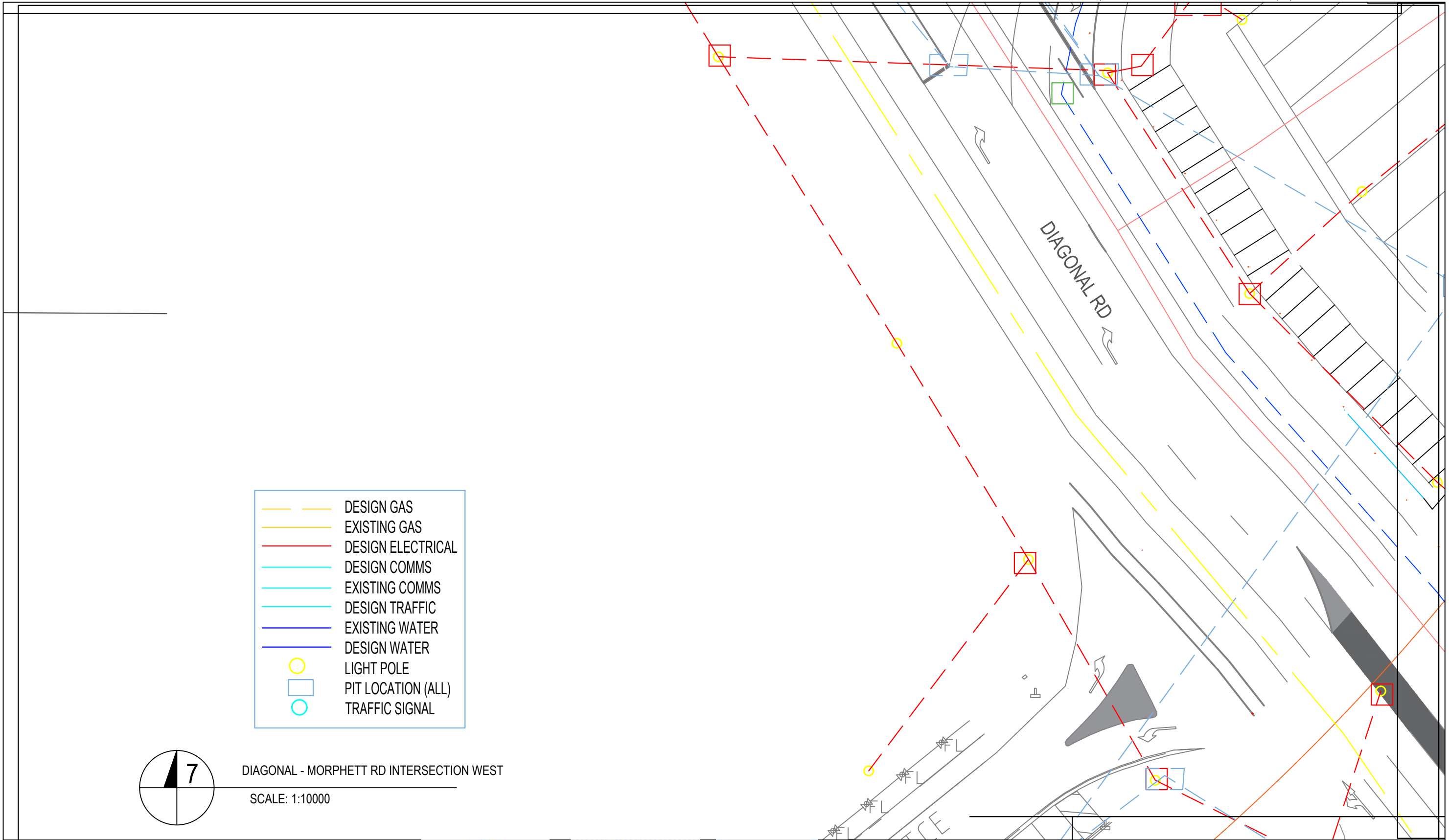
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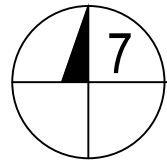
**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: MORPHETT - DIAGONAL RD INTERSECTION EAST, UNDERBRIDGE	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 007	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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- DESIGN GAS
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- DESIGN ELECTRICAL
- DESIGN COMMS
- EXISTING COMMS
- DESIGN TRAFFIC
- EXISTING WATER
- DESIGN WATER
- LIGHT POLE
- PIT LOCATION (ALL)
- TRAFFIC SIGNAL



REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:

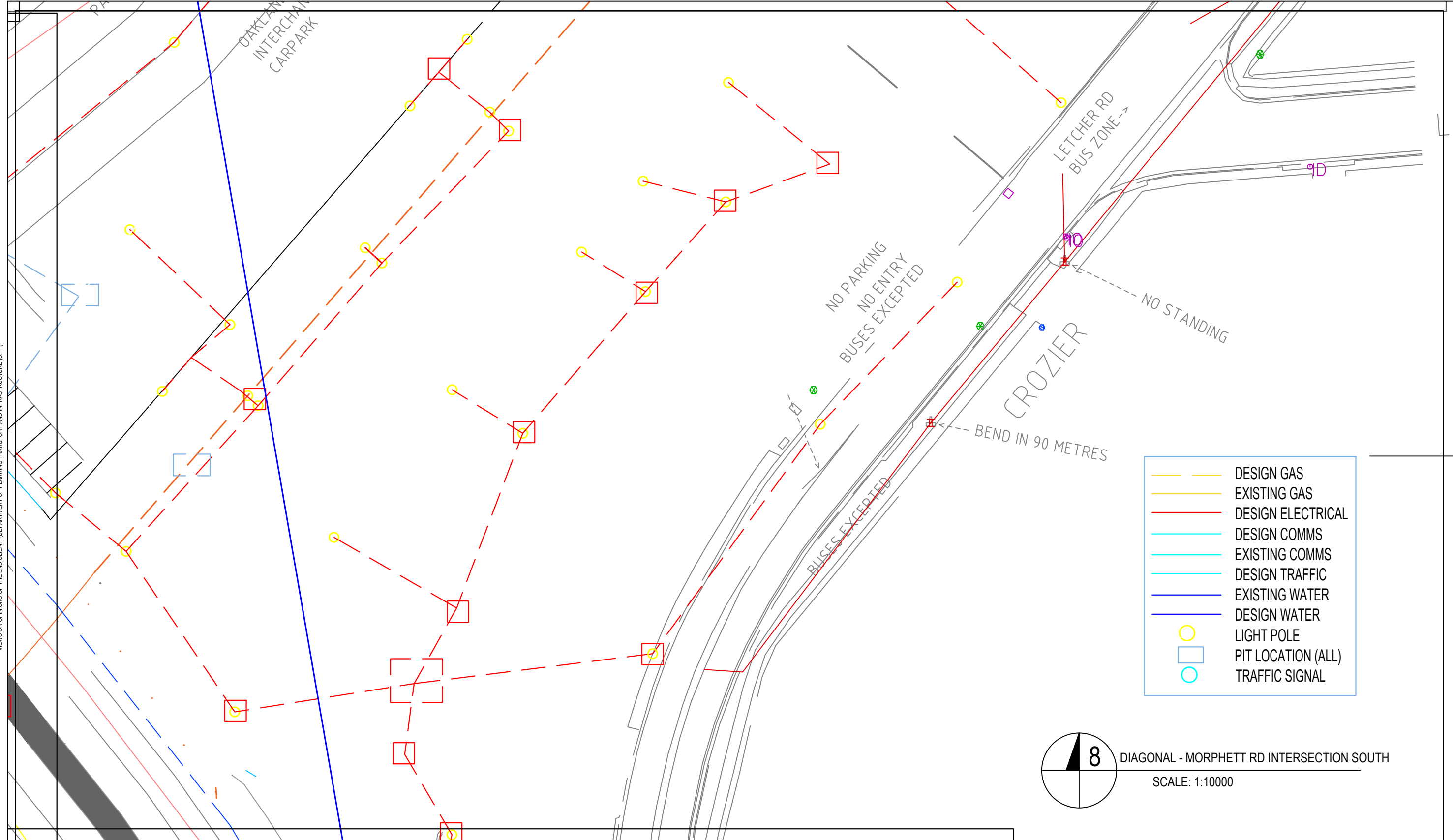


**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: DIAGONAL - MORPHETT RD INTERSECTION WEST	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 008	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN



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	DESIGN COMMS
	EXISTING COMMS
	DESIGN WATER
	EXISTING WATER
	LIGHT POLE
	PIT LOCATION (ALL)
	TRAFFIC SIGNAL

**8** DIAGONAL - MORPHETT RD INTERSECTION SOUTH  
 SCALE: 1:10000

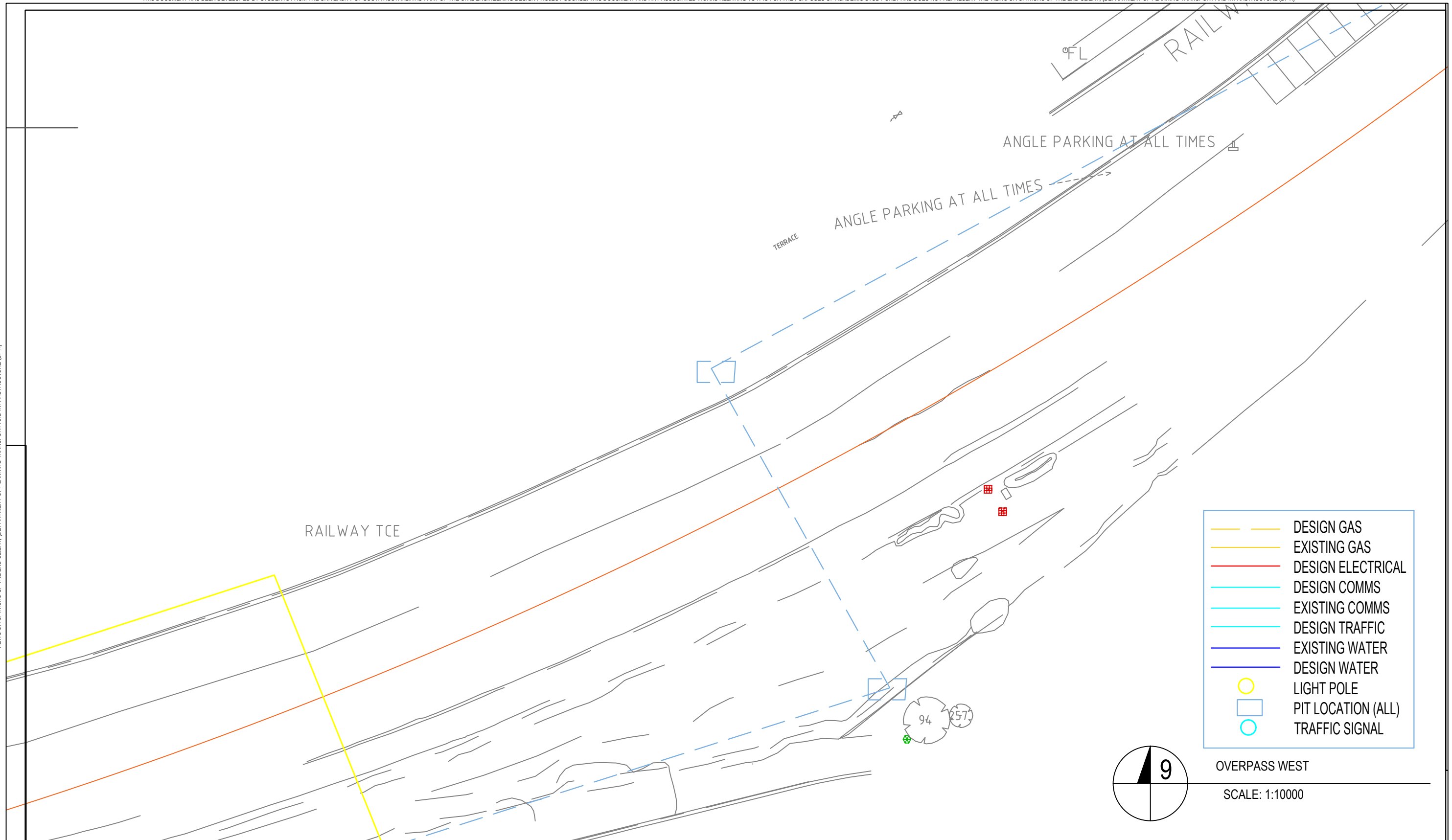
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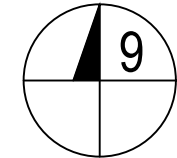
**PROJECT:**  
**OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS**

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VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 009	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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	DESIGN GAS
	EXISTING GAS
	DESIGN ELECTRICAL
	DESIGN COMMS
	EXISTING COMMS
	DESIGN TRAFFIC
	EXISTING WATER
	DESIGN WATER
	LIGHT POLE
	PIT LOCATION (ALL)
	TRAFFIC SIGNAL



OVERPASS WEST  
SCALE: 1:10000












REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: OVERPASS WEST
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 010
APPROVED BY:	SIGNED:	DATE:	REVISION:
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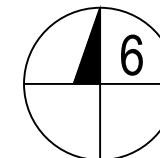
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	DESIGN WATER
	LIGHT POLE
	PIT LOCATION (ALL)
	TRAFFIC SIGNAL

OVERHEAD RAILWAY TRAFFIC SIGNAL

LADDER A1338

LADDER P1337

ADDISON



OVERPASS WEST PROJECT END

SCALE: 1:10000

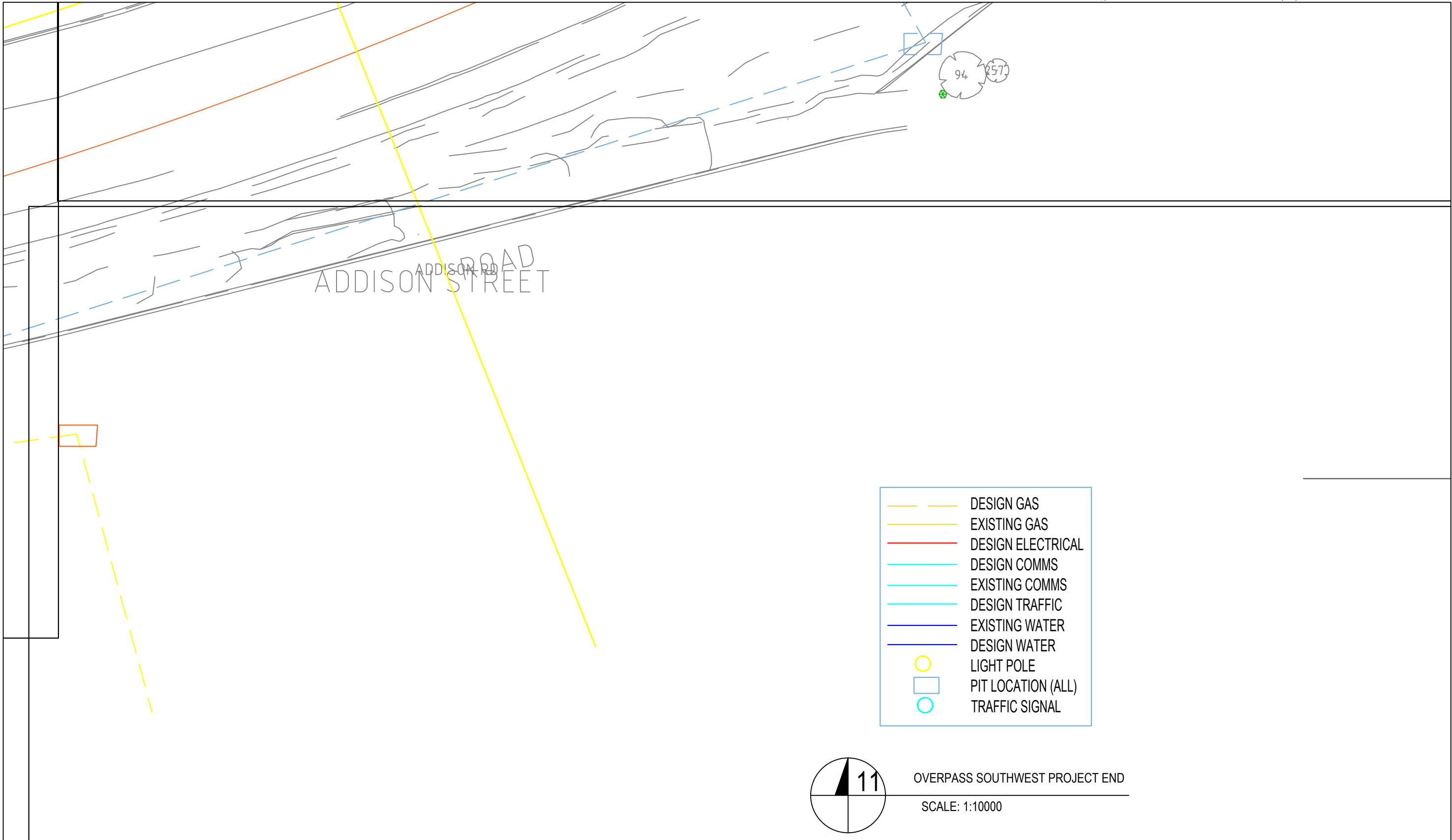
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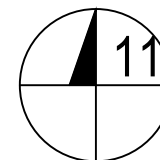
**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: VERPASS WEST PROJECT END	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 011	REVISION:
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- DESIGN GAS
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- DESIGN COMMS
- EXISTING COMMS
- DESIGN TRAFFIC
- EXISTING WATER
- DESIGN WATER
- LIGHT POLE
- PIT LOCATION (ALL)
- TRAFFIC SIGNAL



OVERPASS SOUTHWEST PROJECT END

SCALE: 1:10000

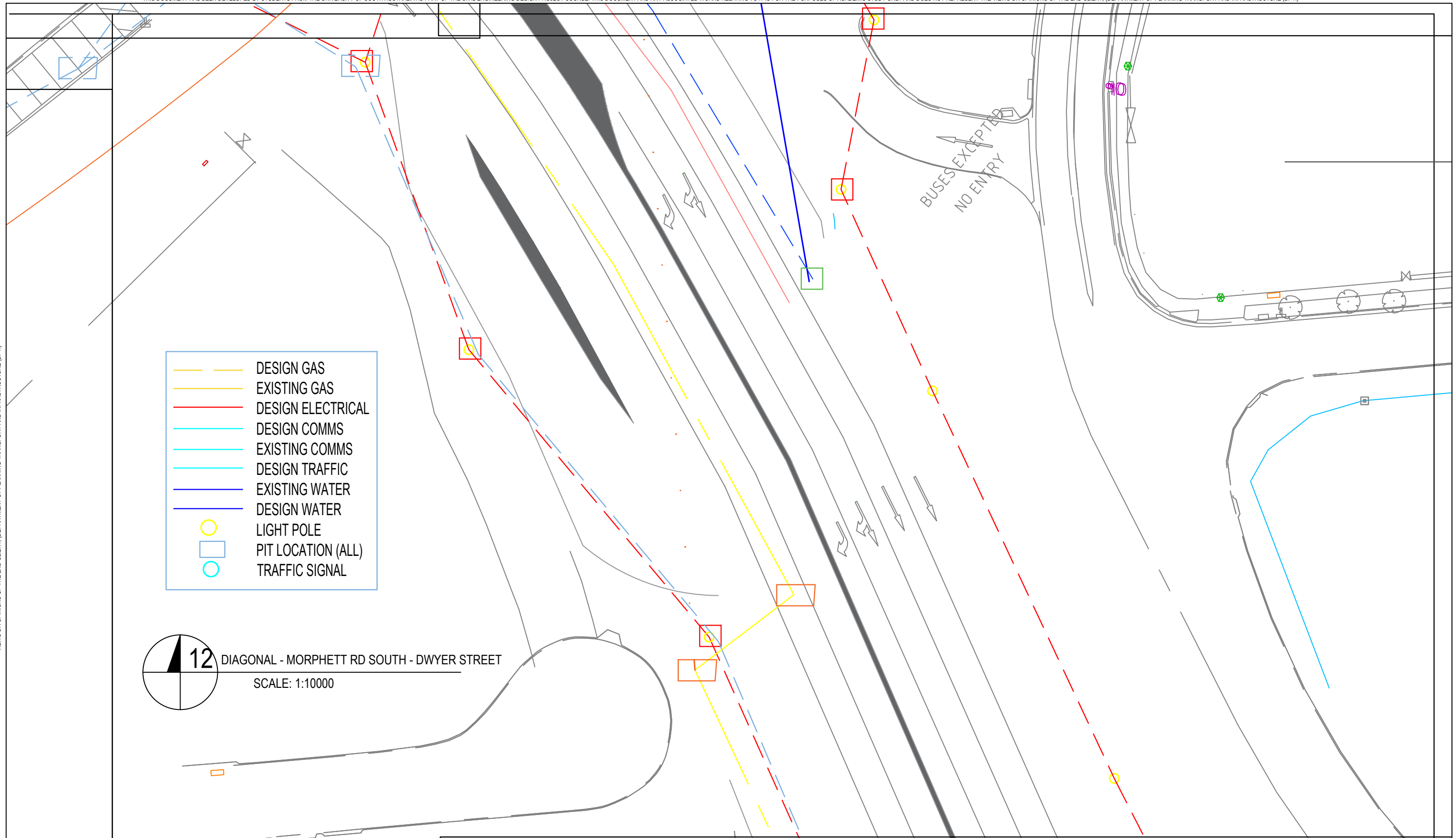
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**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: OVERPASS SOUTHWEST PROJECT END	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
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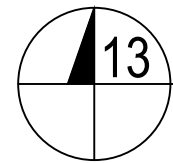
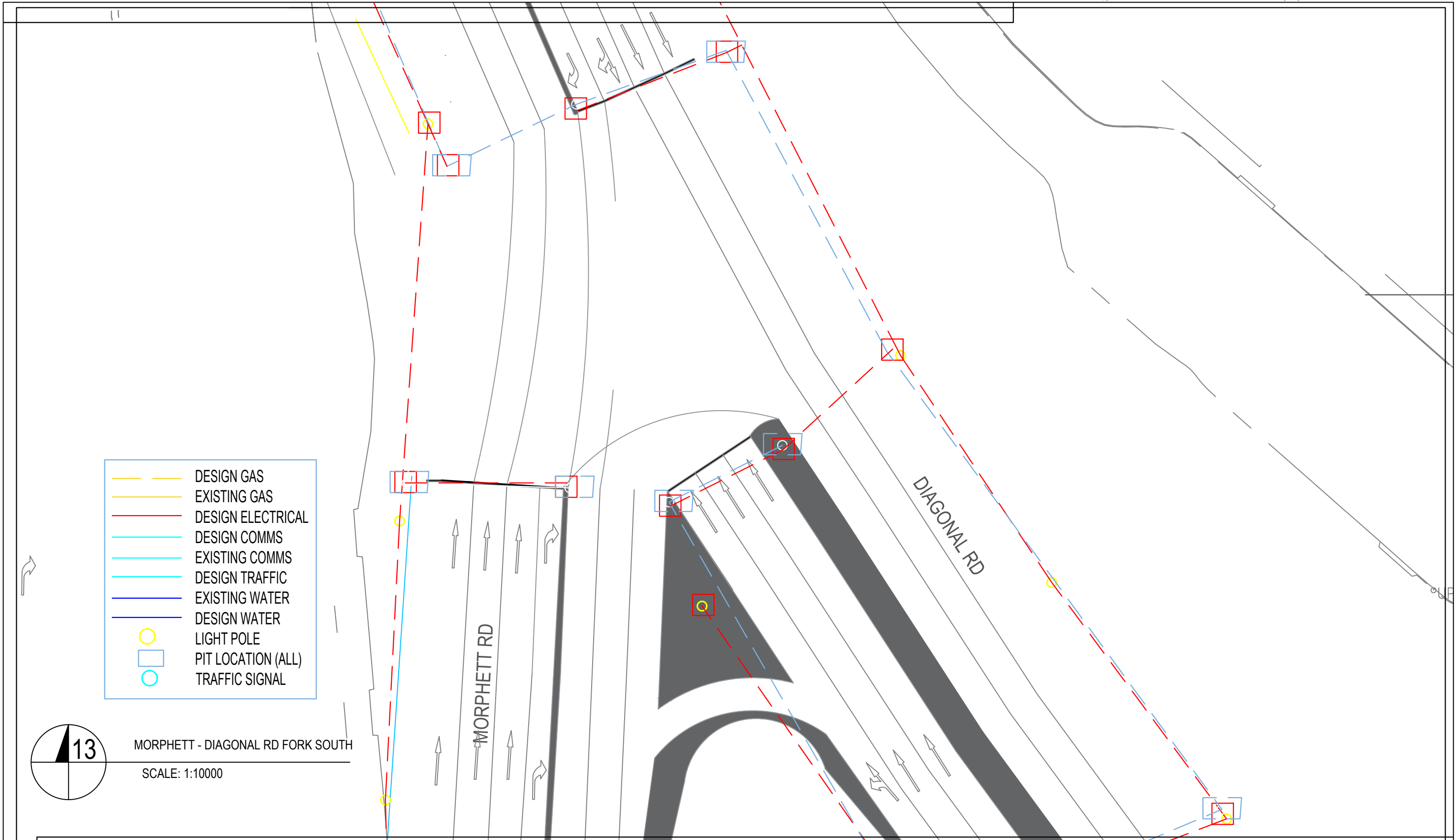
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**PROJECT:**  
OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: DIAGONAL - MORPHETT RD SOUTH - DWYER STREET	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 013	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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MORPHETT - DIAGONAL RD FORK SOUTH

SCALE: 1:10000

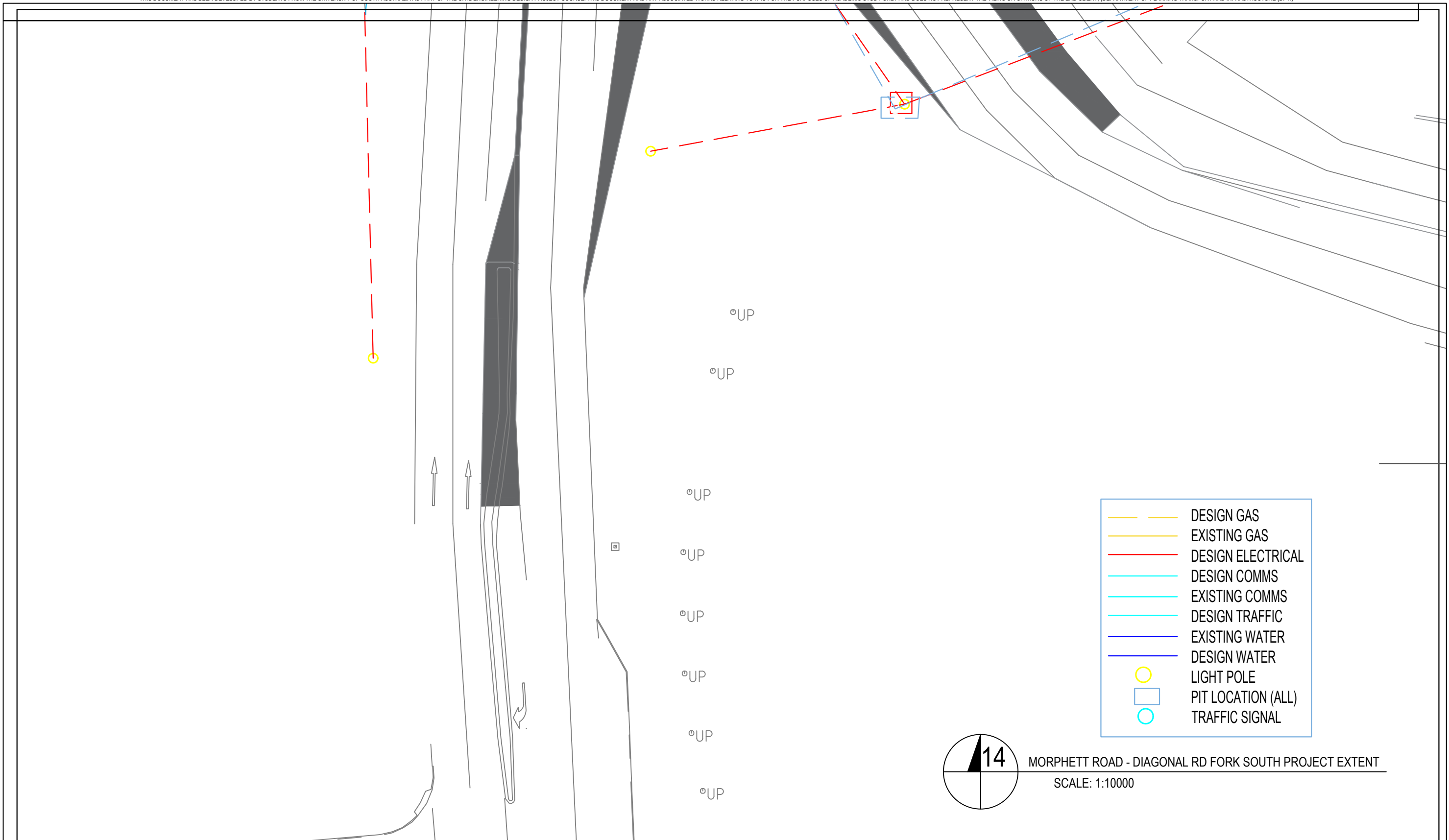
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: MORPHETT - DIAGONAL RD FORK SOUTH	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 014	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:

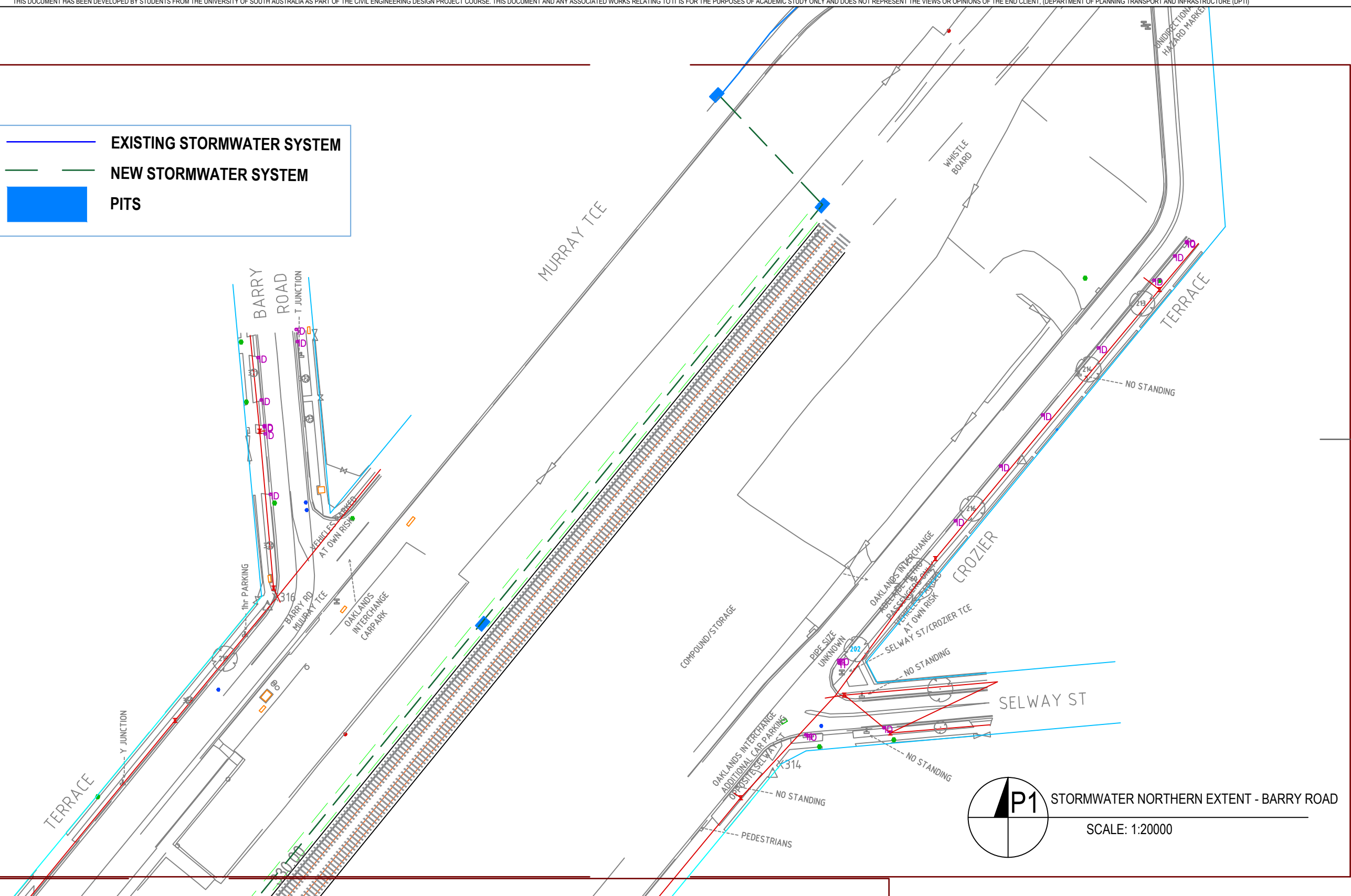


**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: MARC V	SIGNED: MV	DATE: 08.06.2017	DRAWING TITLE: MORPHETT ROAD - DIAGONAL RD FORK SOUTH PROJECT EXTENT	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 015	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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	<b>EXISTING STORMWATER SYSTEM</b>
	<b>NEW STORMWATER SYSTEM</b>
	<b>PITS</b>



**P1** STORMWATER NORTHERN EXTENT - BARRY ROAD  
SCALE: 1:20000

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:

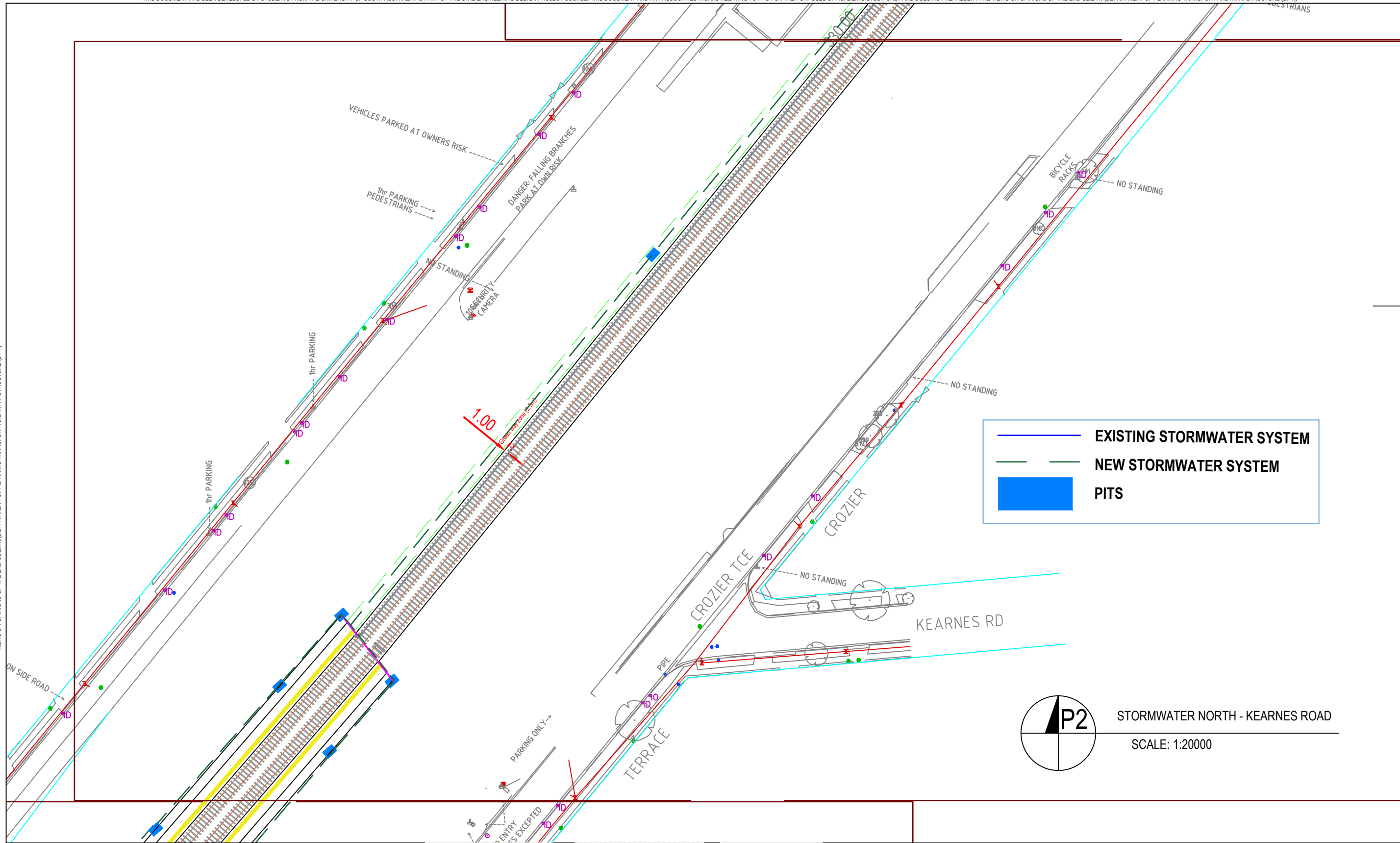



**PROJECT:**  
**OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS**

DRAWN BY: LINGZI Z	SIGNED: LZ	DATE: 08.06.2017	DRAWING TITLE: STORMWATER NORTHERN EXTENT - BARRY ROAD	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 016	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN



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	<b>EXISTING STORMWATER SYSTEM</b>
	<b>NEW STORMWATER SYSTEM</b>
	<b>PITS</b>

**P2** STORMWATER NORTH - KEARNES ROAD  
SCALE: 1:20000

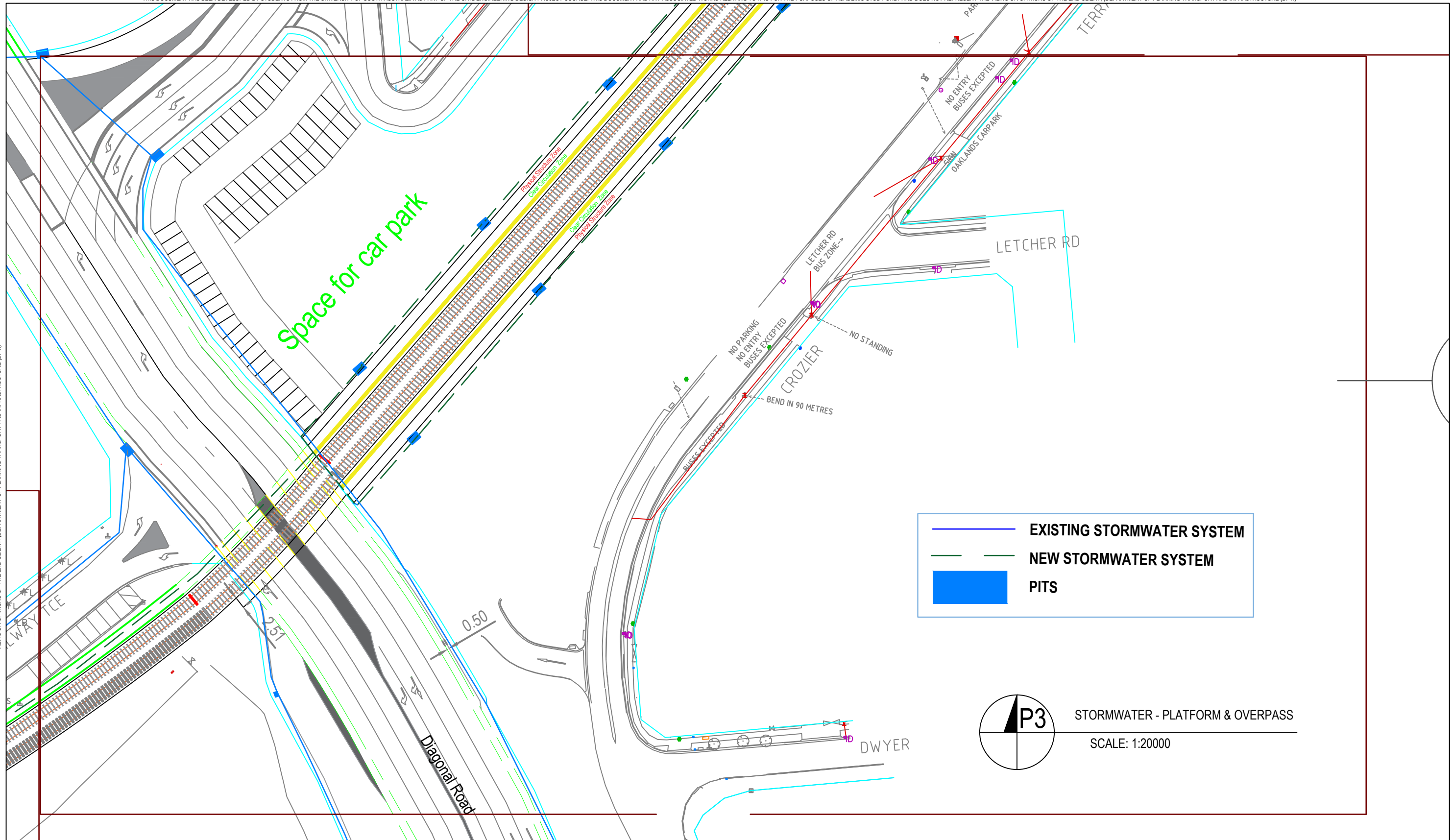
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:







**PROJECT:**  
**OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS**

DRAWN BY: LINGZI Z	SIGNED:	DATE: 08.06.2017	DRAWING TITLE: STORMWATER NORTH - KEARNES ROAD	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 017	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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	EXISTING STORMWATER SYSTEM
	NEW STORMWATER SYSTEM
	PITS


P3

**STORMWATER - PLATFORM & OVERPASS**  
 SCALE: 1:20000



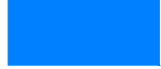
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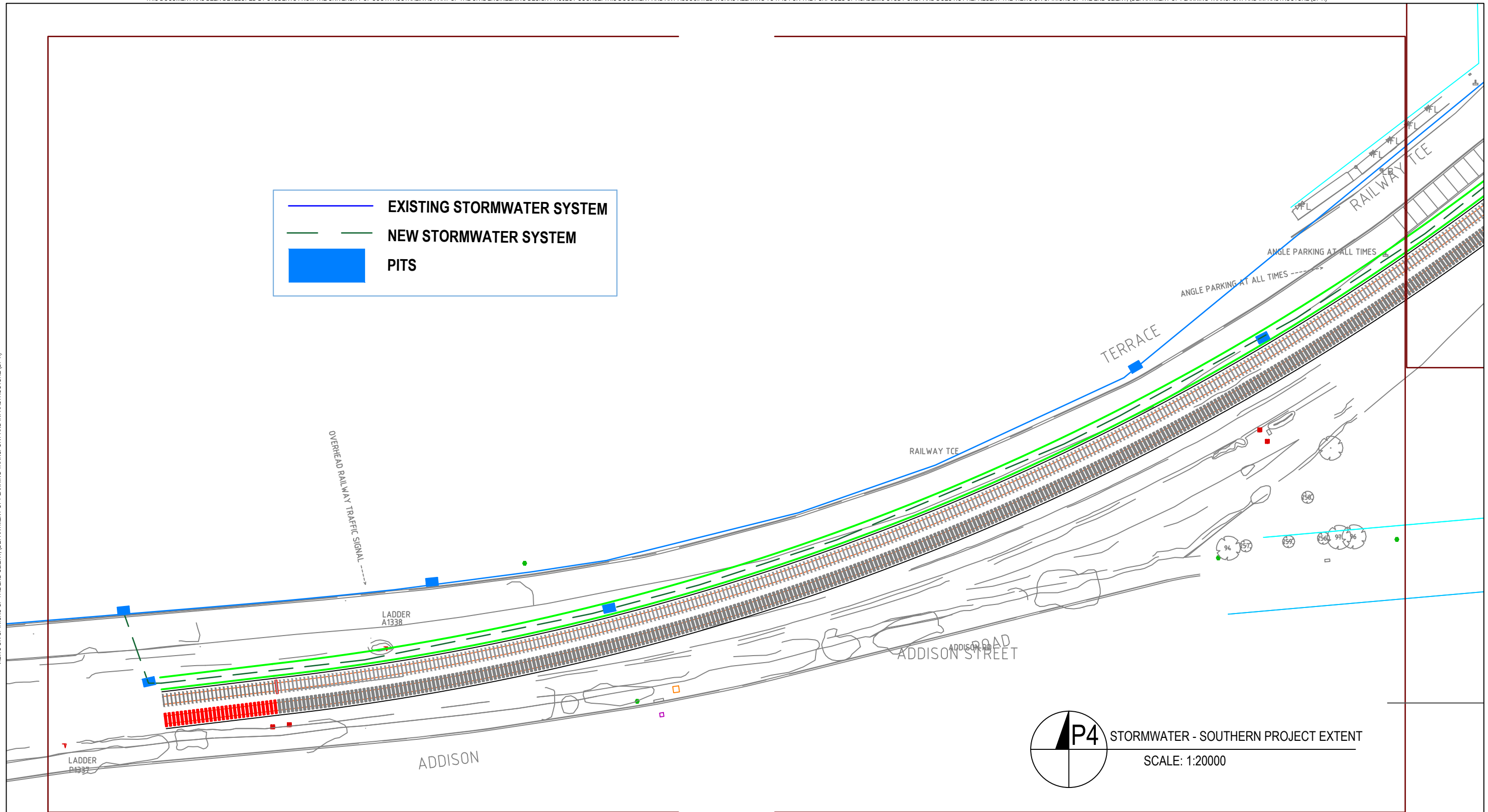


**PROJECT:**  
**OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS**

DRAWN BY: LINGZI Z	SIGNED:	DATE: 08.06.2017	DRAWING TITLE: STORMWATER - PLATFORM & OVERPASS	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 018	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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	<b>EXISTING STORMWATER SYSTEM</b>
	<b>NEW STORMWATER SYSTEM</b>
	<b>PITS</b>



**P4** STORMWATER - SOUTHERN PROJECT EXTENT  
SCALE: 1:20000

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**Government of South Australia**  
Department of Planning, Transport and Infrastructure



**University of South Australia**



**DPC**  
The Difference in thinking

**PROJECT:**  
**OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS**

DRAWN BY: LINGZI Z	SIGNED: LZ	DATE: 08.06.2017	DRAWING TITLE: Stormwater - Southern Project Extent
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 011
APPROVED BY:	SIGNED:	DATE:	REVISION: AS SHOWN

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**Note:**

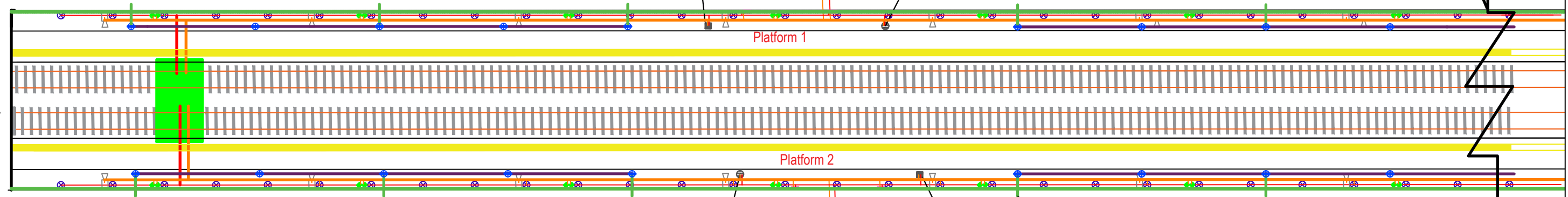
1. SPEAKERS ARE MOUNTED TO THE LIGHT POLE NEXT TO THEM
2. CCTV ARE MOUNTED TO THE LIGHT POLE NEXT TO THEM
3. CONTROL ROOM IS AT GROUND LEVEL UNDER THE RAILWAY PLATFORM
4. ALL STORMWATER PIPES TO BE REINFORCED CONCRETE PIPE CLASS 2 U.N.O.

# MURRAY TERRACE

THE SPACING OF THE SERVICES ARE THE SAME TILL THE END OF THE PLATFORM

EMERGENCY PHONE TO TRANS ADELAIDE SPECIFICATION MOUNTED ON CHS COLUMN TO BE PAINTED ROYAL BLUE TO 2000MM HIGH

VOICE ANNUCIATOR TO TRANS ADELAIDE SPECIFICATION MOUNTED ON CHS COLUMN CO-LOCATE WITH HEARING INDUCTION LOOP IN PLATFORM SLAB COLUMN TO BE PAINTED YELLOW TO 2000MM HIGH



**LEGEND**

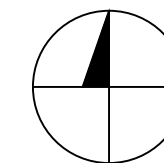
- ELECTRICAL LINE
- COMMS
- STORMWATER PIPE
- GUTTER
- ⊕ DOWNPIPE
- ▬ LINEAR TRENCH DRAINAGE
- ⊕ LIGHT POLE
- LIFT
- PASSENGER DISPLAY SYSTEM
- ◆ SPEAKER
- CCTV
- CONTROL ROOM

VOICE ANNUCIATOR TO TRANS ADELAIDE SPECIFICATION MOUNTED ON CHS COLUMN CO-LOCATE WITH HEARING INDUCTION LOOP IN PLATFORM SLAB COLUMN TO BE PAINTED YELLOW TO 2000MM HIGH

EMERGENCY PHONE TO TRANS ADELAIDE SPECIFICATION MOUNTED ON CHS COLUMN TO BE PAINTED ROYAL BLUE TO 2000MM HIGH

STORMWATER PIPE WILL DIRECT THE STORMWATER FROM GUTTER AND TRENCH DRAINAGE TO THE NEW STORMWATER SYSTEM FOR OVERPASS

# CROZIER TERRACE



RAIL PLATFORM

SCALE: 1:10000

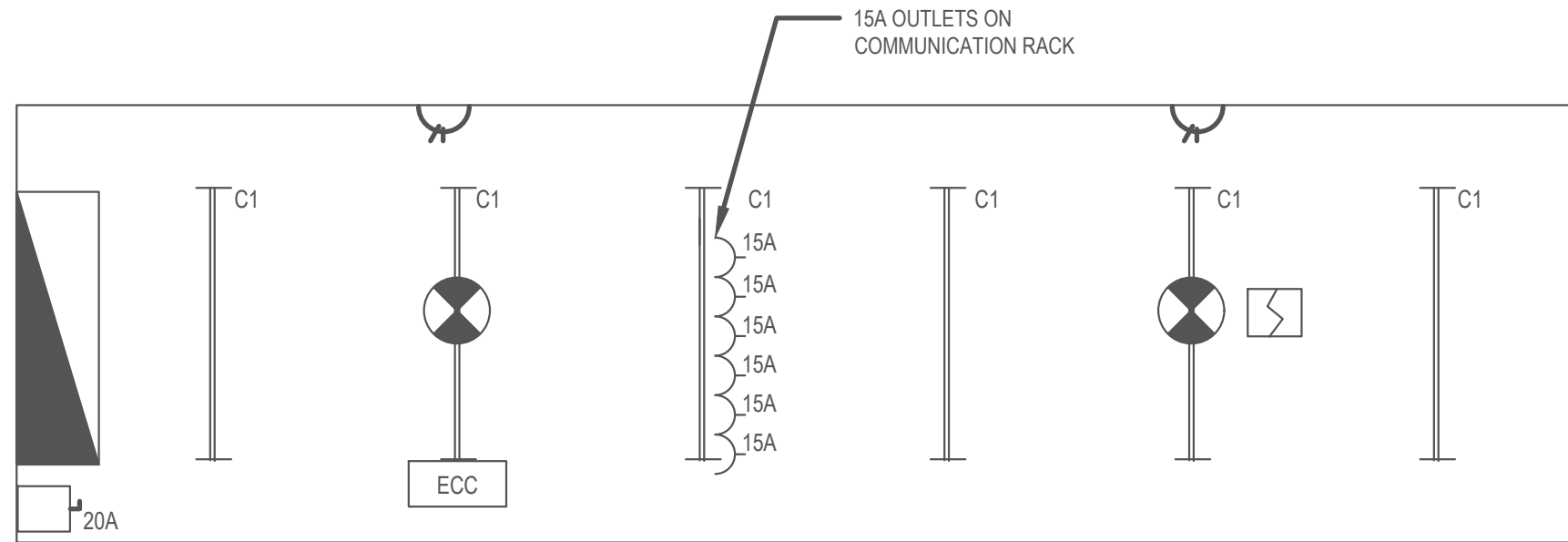
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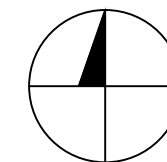
**PROJECT:**  
OAKLANDS PARK TRAIN GRADE SEPARATION - DIAGONAL AND MORPHETT ROADS

DRAWN BY: DENIS C	SIGNED: DC	DATE: 08.06.2017	DRAWING TITLE: RAIL PLATFORM	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 019	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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- LEGEND
- LINEAR FLUORESCENT FITTING
  - LINEAR FLUORESCENT FITTING WITH EMERGENCY PACK
  - MAIN SWITCHBOARD
  - SINGLE PHASE 250V 10A DOUBLE SWITCHED WALL MOUNTED POWER OUTLET
  - ECC EARTH COLLECTOR CABINET
  - SINGLE PHASE 250V IP56 ISOLATOR SWITCH



RAIL PLATFORM - CONTROL ROOM LAYOUT

SCALE: 1:1000

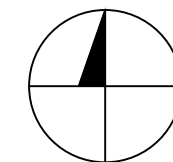
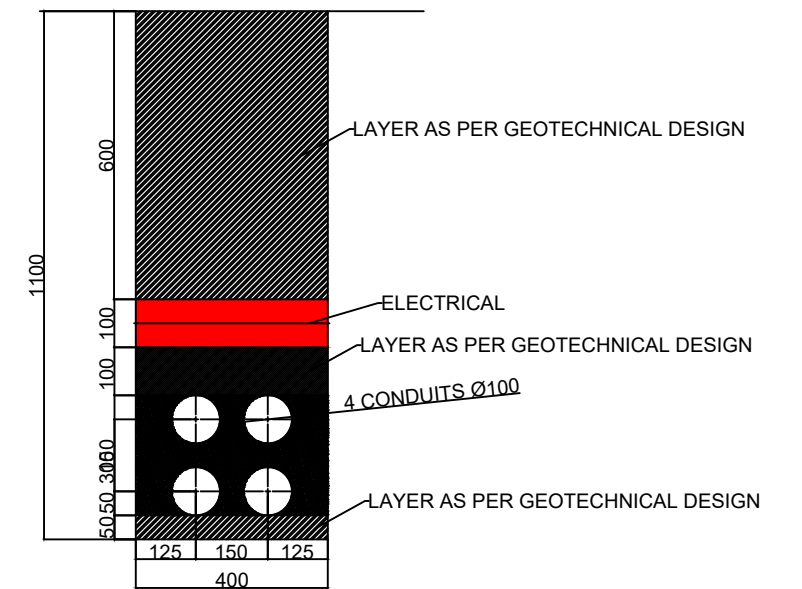
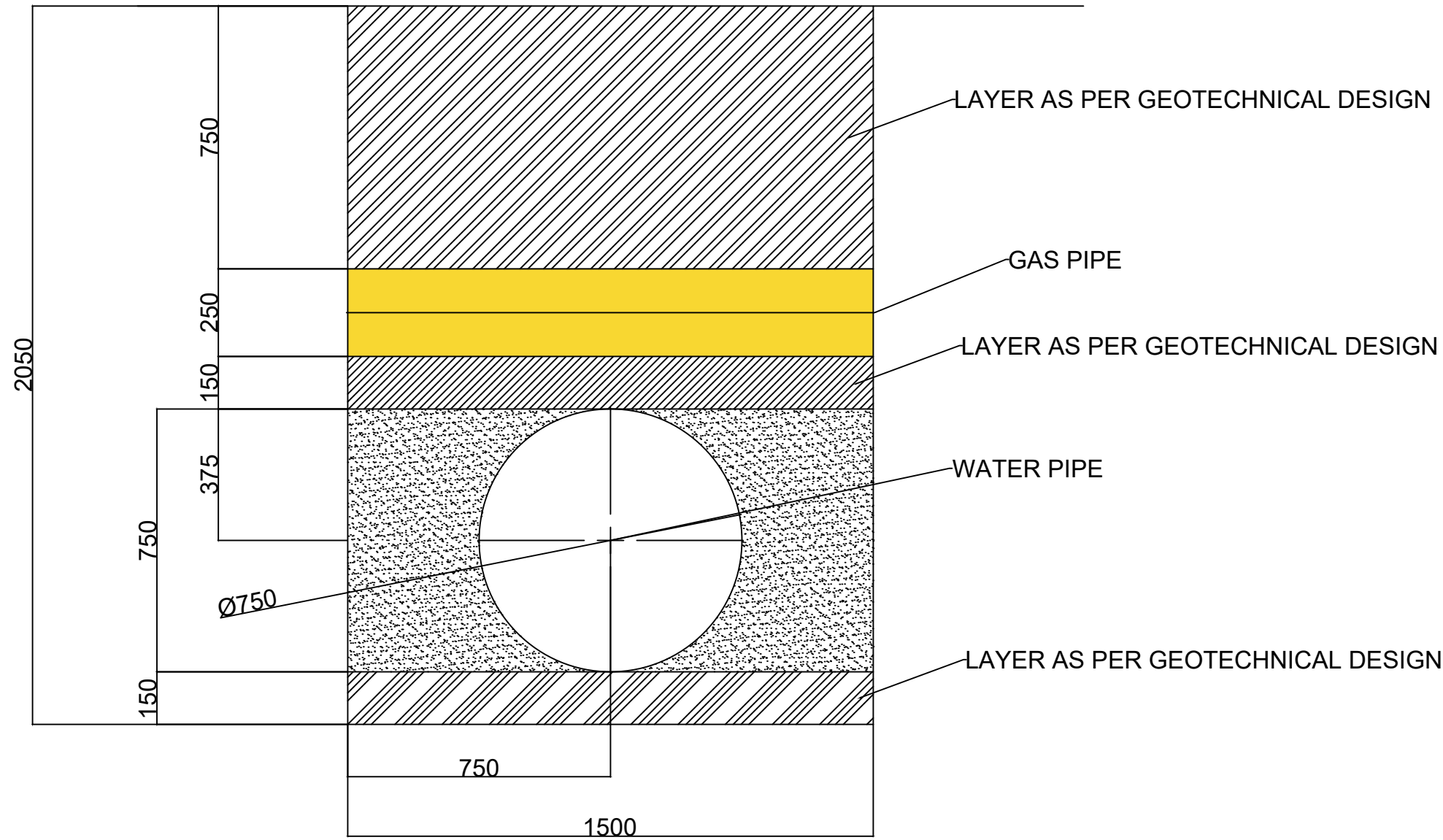
REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: DENIS C	SIGNED: DC	DATE: 08.06.2017	DRAWING TITLE: RAIL PLATFORM - CONTROL ROOM LAYOUT	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 09.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 08.06.2017	DRAWING NUMBER: 020	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN

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TYPICAL SECTION VIEW OF WATER, GAS & ELECTRICITY TRENCH

SCALE: 1:400

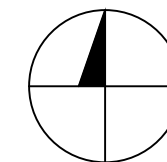
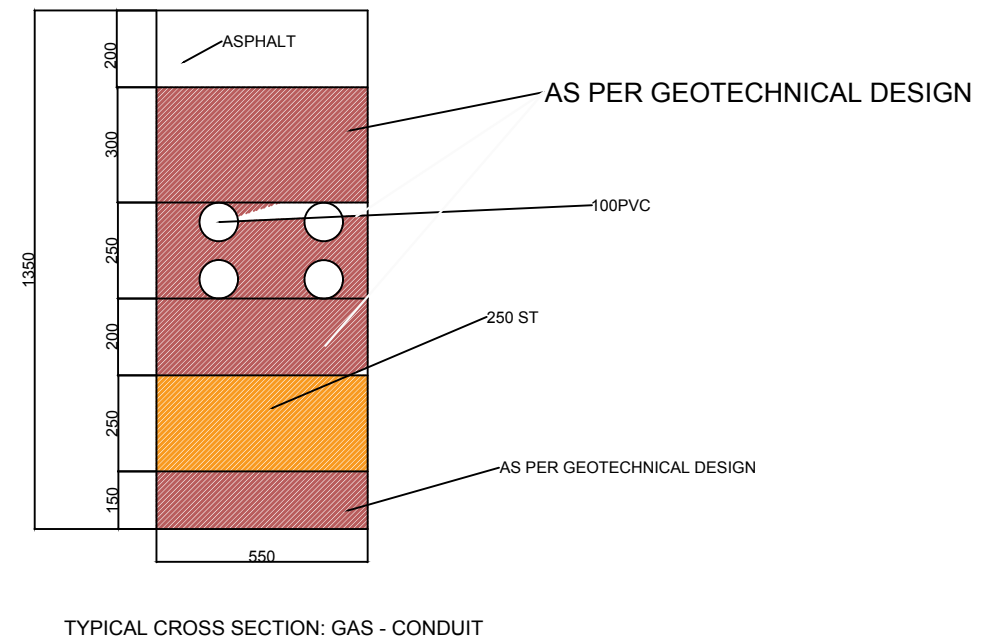
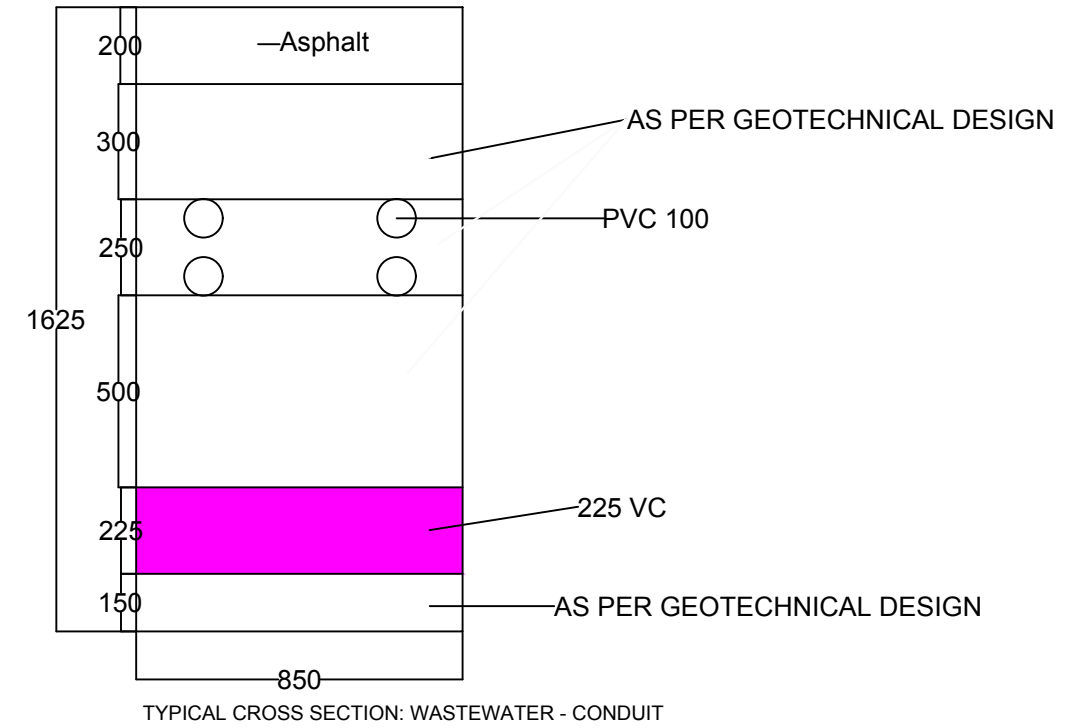
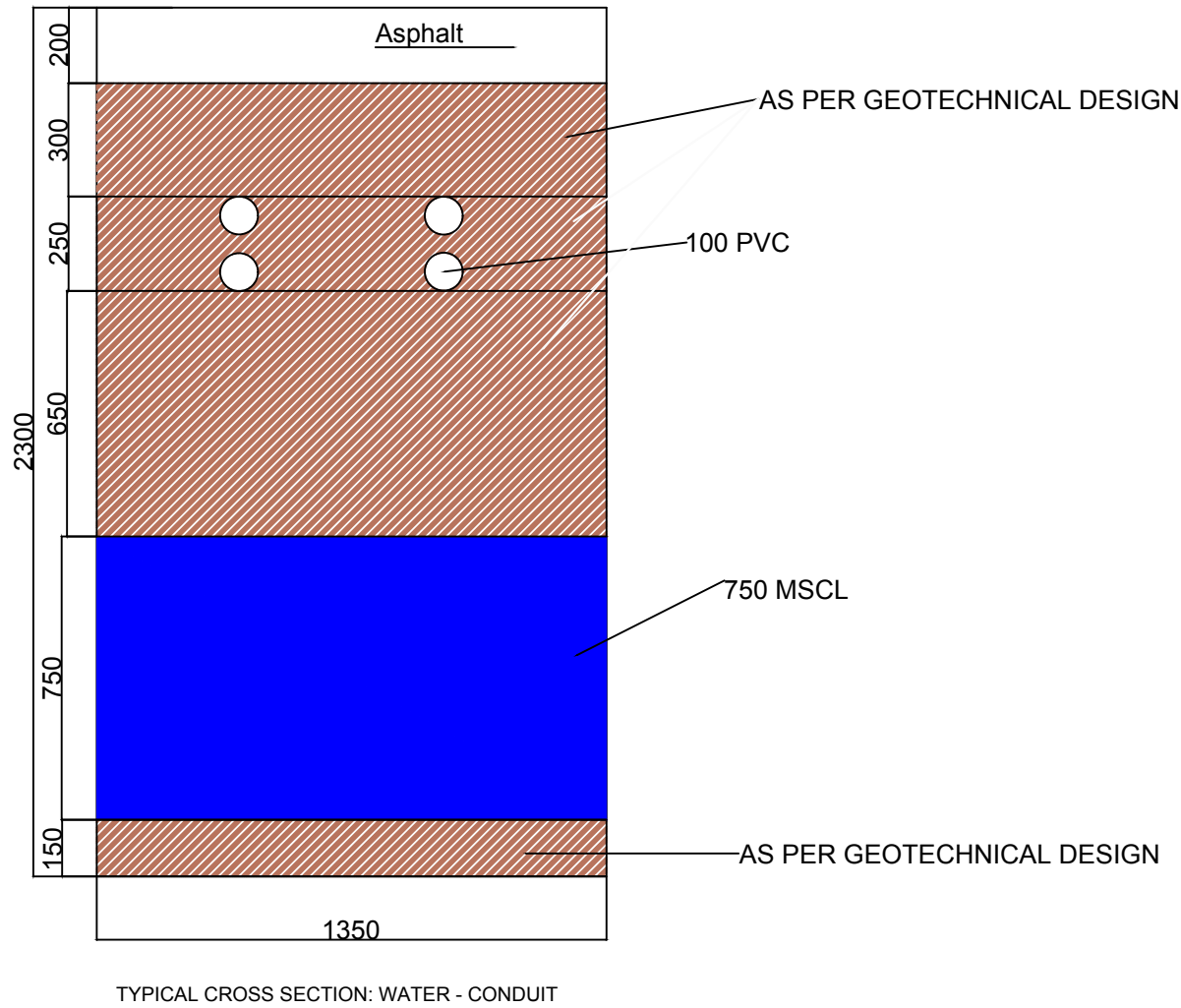
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**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: JOEL EGEL	SIGNED: JE	DATE: 12.06.2017	DRAWING TITLE: TYPICAL SECTION VIEW OF WATER, GAS & ELECTRICITY	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 12.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 12.06.2017	DRAWING NUMBER: 021	REVISION:
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SERVICES TRENCH CROSS SECTION LAYOUT

SCALE: 1:500

REVISION NO.	REVISION DESCRIPTION	REVISION DATE	BY:	VERIFIED BY:	APPROVED BY:



**PROJECT:**  
OAKLANDS PARK TRAIN  
GRADE SEPARATION -  
DIAGONAL AND  
MORPHETT ROADS

DRAWN BY: AMRINDER SINGH	SIGNED: AS	DATE: 13.06.2017	DRAWING TITLE: SERVICES TRENCH CROSS SECTION LAYOUT	
VERIFIED BY: TSEHRING PENJOR	SIGNED: TP	DATE: 13.06.2017	PROJECT NUMBER: 0617-001	
CHECKED BY: MARC VIECELI	SIGNED: MARC	DATE: 13.06.2017	DRAWING NUMBER: 022	REVISION:
APPROVED BY:	SIGNED:	DATE:	SCALE:	AS SHOWN