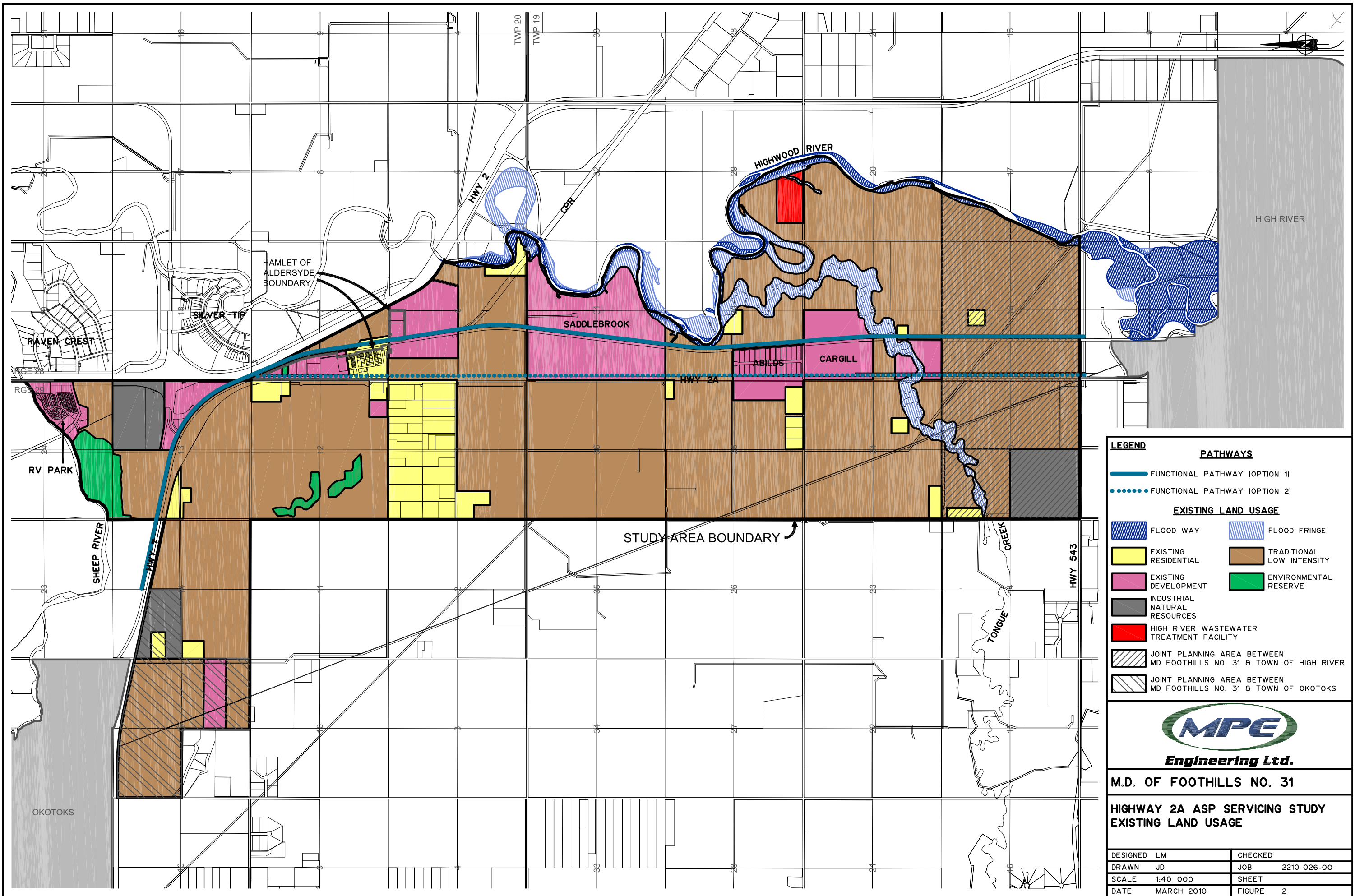


APPENDIX A

Figures



LEGEND

PATHWAYS

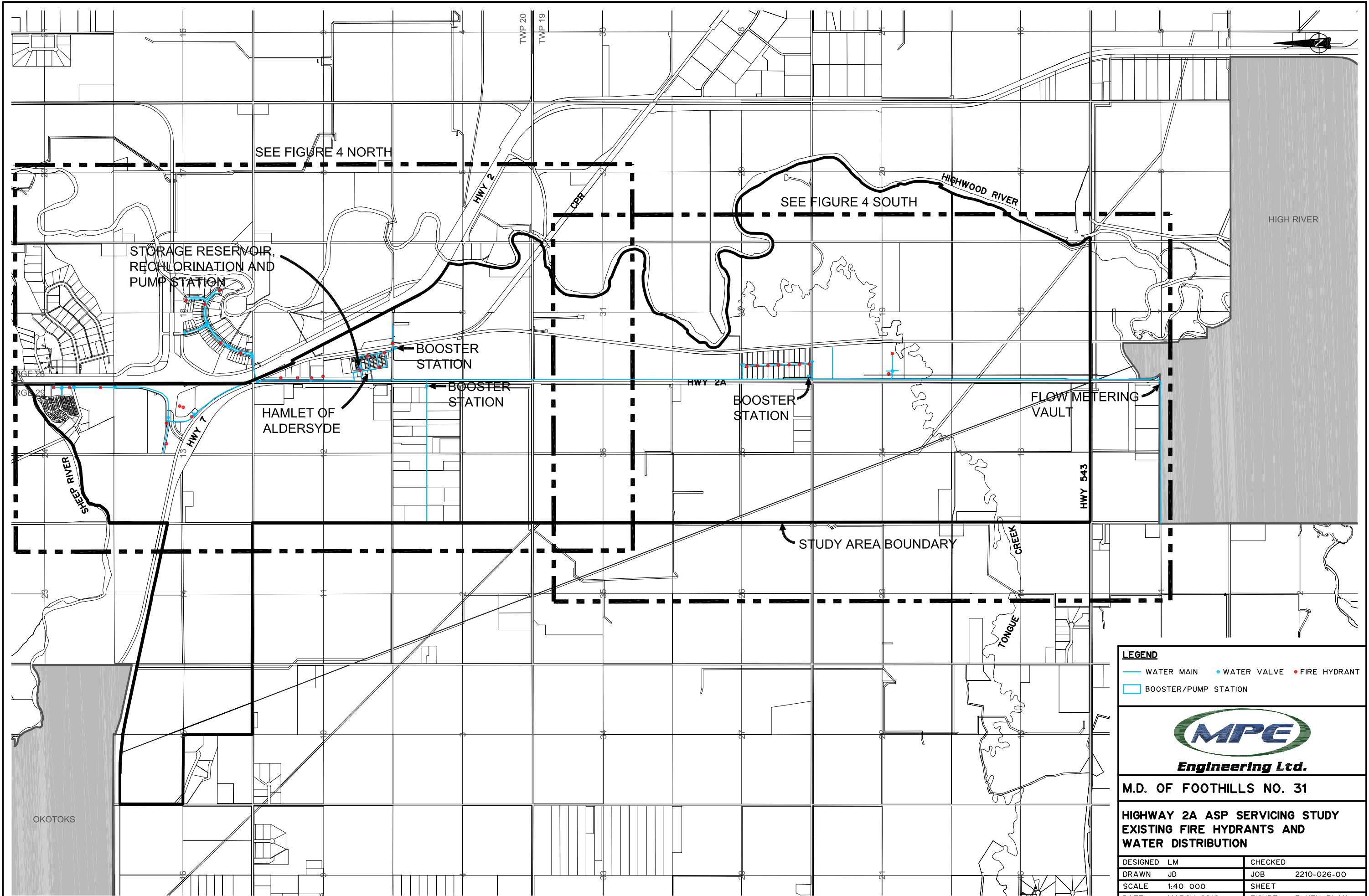
- FUNCTIONAL PATHWAY (OPTION 1)
- FUNCTIONAL PATHWAY (OPTION 2)

EXISTING LAND USAGE

- FLOOD WAY
- FLOOD FRINGE
- EXISTING RESIDENTIAL
- EXISTING DEVELOPMENT
- INDUSTRIAL NATURAL RESOURCES
- HIGH RIVER WASTEWATER TREATMENT FACILITY
- JOINT PLANNING AREA BETWEEN MD FOOTHILLS NO. 31 & TOWN OF HIGH RIVER
- JOINT PLANNING AREA BETWEEN MD FOOTHILLS NO. 31 & TOWN OF OKOTOKS
- TRADITIONAL LOW INTENSITY
- ENVIRONMENTAL RESERVE



M.D. OF FOOTHILLS NO. 31			
HIGHWAY 2A ASP SERVICING STUDY EXISTING LAND USAGE			
DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	2



LEGEND		
	WATER MAIN	WATER VALVE FIRE HYDRANT
	BOOSTER/PUMP STATION	

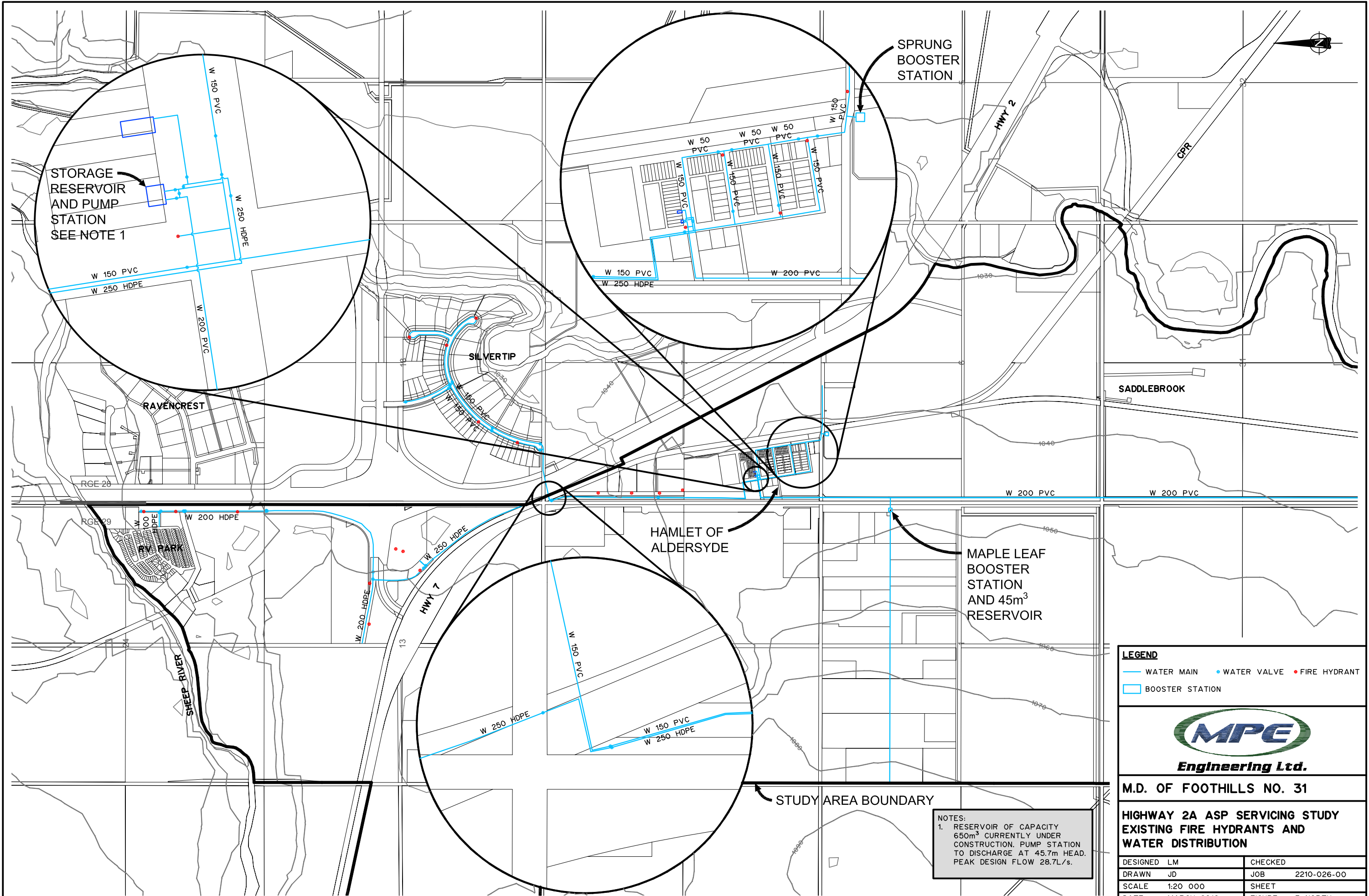


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M.D. OF FOOTHILLS NO. 31

**HIGHWAY 2A ASP SERVICING STUDY
EXISTING FIRE HYDRANTS AND
WATER DISTRIBUTION**

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	3 KEY PLAN



LEGEND

— WATER MAIN • WATER VALVE • FIRE HYDRANT

□ BOOSTER STATION

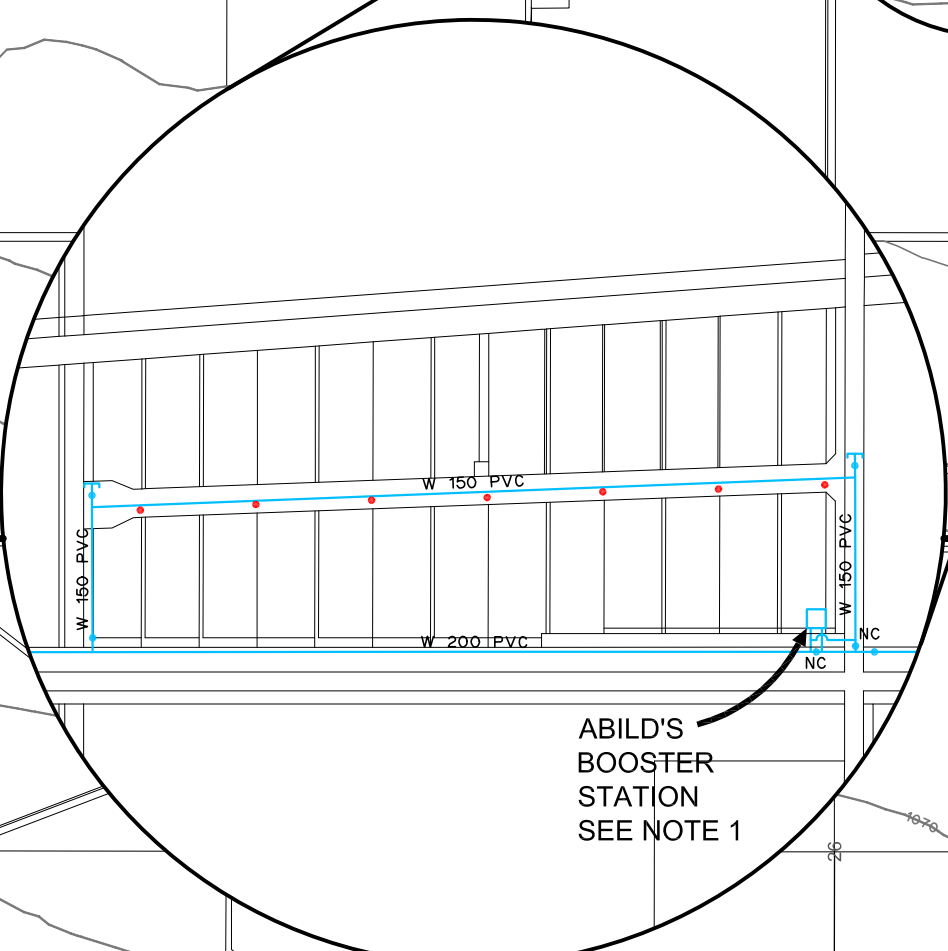
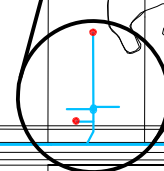
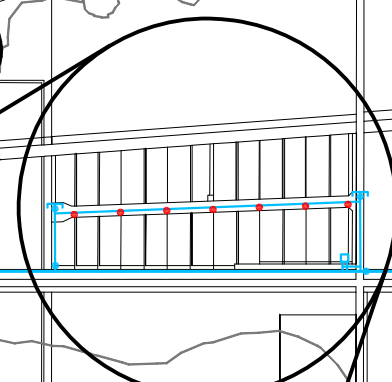
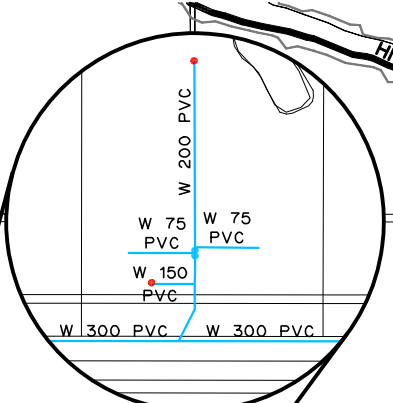
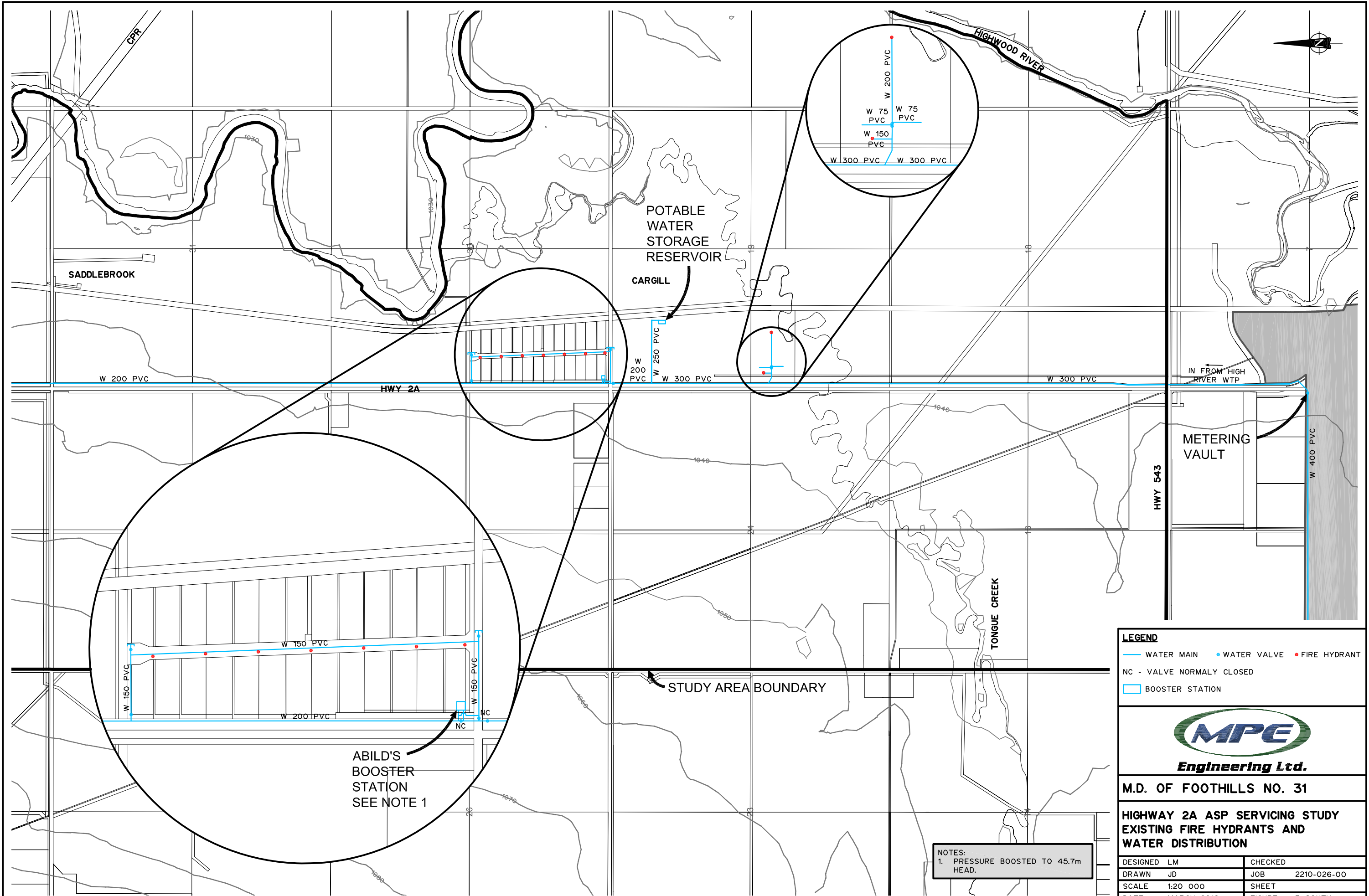


M.D. OF FOOTHILLS NO. 31

**HIGHWAY 2A ASP SERVICING STUDY
EXISTING FIRE HYDRANTS AND
WATER DISTRIBUTION**

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:20 000	SHEET	
DATE	MARCH 2010	FIGURE	3 NORTH

NOTES:
1. RESERVOIR OF CAPACITY 650m³ CURRENTLY UNDER CONSTRUCTION. PUMP STATION TO DISCHARGE AT 45.7m HEAD. PEAK DESIGN FLOW 28.7L/s.



LEGEND

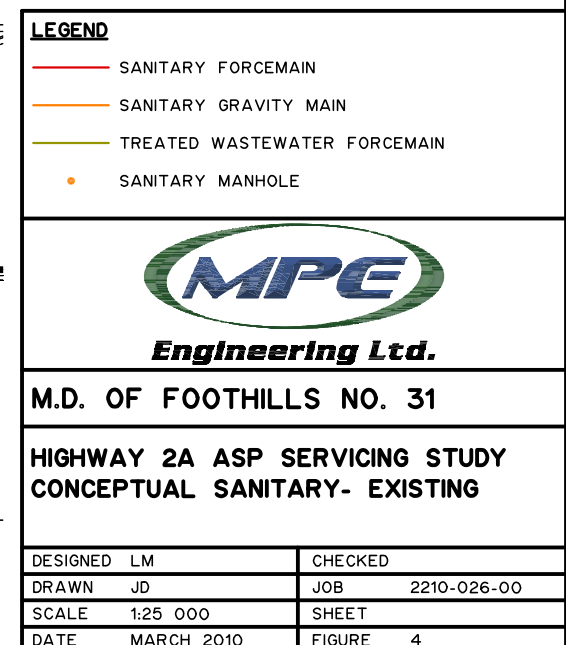
— WATER MAIN	• WATER VALVE	• FIRE HYDRANT
NC - VALVE NORMALLY CLOSED		
□ BOOSTER STATION		

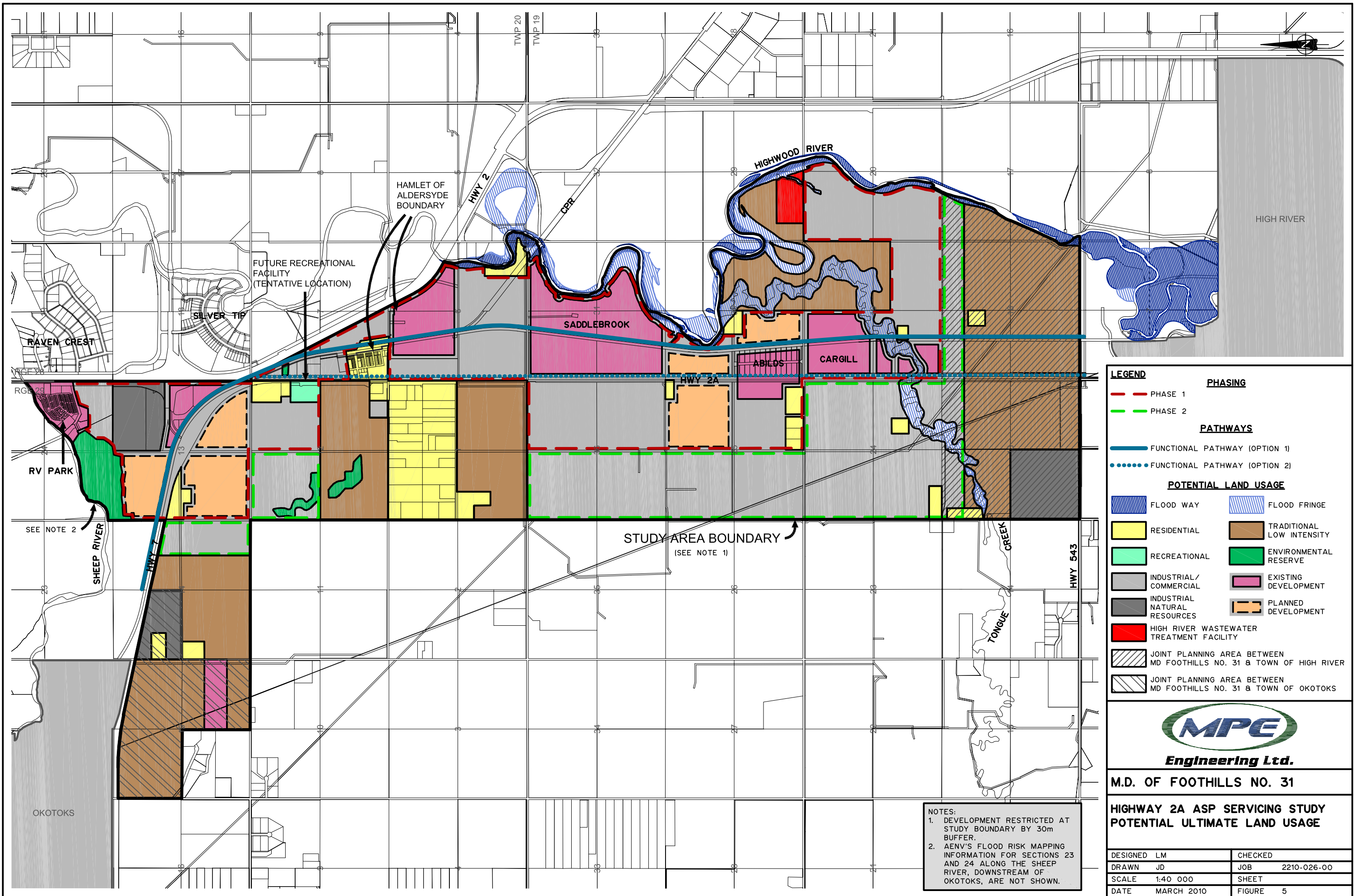


M.D. OF FOOTHILLS NO. 31			
HIGHWAY 2A ASP SERVICING STUDY EXISTING FIRE HYDRANTS AND WATER DISTRIBUTION			
DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:20 000	SHEET	
DATE	MARCH 2010	FIGURE	3 SOUTH

NOTES:
1. PRESSURE BOOSTED TO 45.7m
HEAD.

ABILD'S
BOOSTER
STATION
SEE NOTE 1





LEGEND

PHASE 1

PHASE 2

PATHWAYS

FUNCTIONAL PATHWAY (OPTION 1)

FUNCTIONAL PATHWAY (OPTION 2)

POTENTIAL LAND USAGE

FLOOD WAY

RESIDENTIAL

RECREATIONAL

INDUSTRIAL/COMMERCIAL

INDUSTRIAL NATURAL RESOURCES

HIGH RIVER WASTEWATER TREATMENT FACILITY

JOINT PLANNING AREA BETWEEN MD FOOTHILLS NO. 31 & TOWN OF HIGH RIVER

JOINT PLANNING AREA BETWEEN MD FOOTHILLS NO. 31 & TOWN OF OKOTOKS

FLOOD FRINGE

TRADITIONAL LOW INTENSITY

ENVIRONMENTAL RESERVE

EXISTING DEVELOPMENT

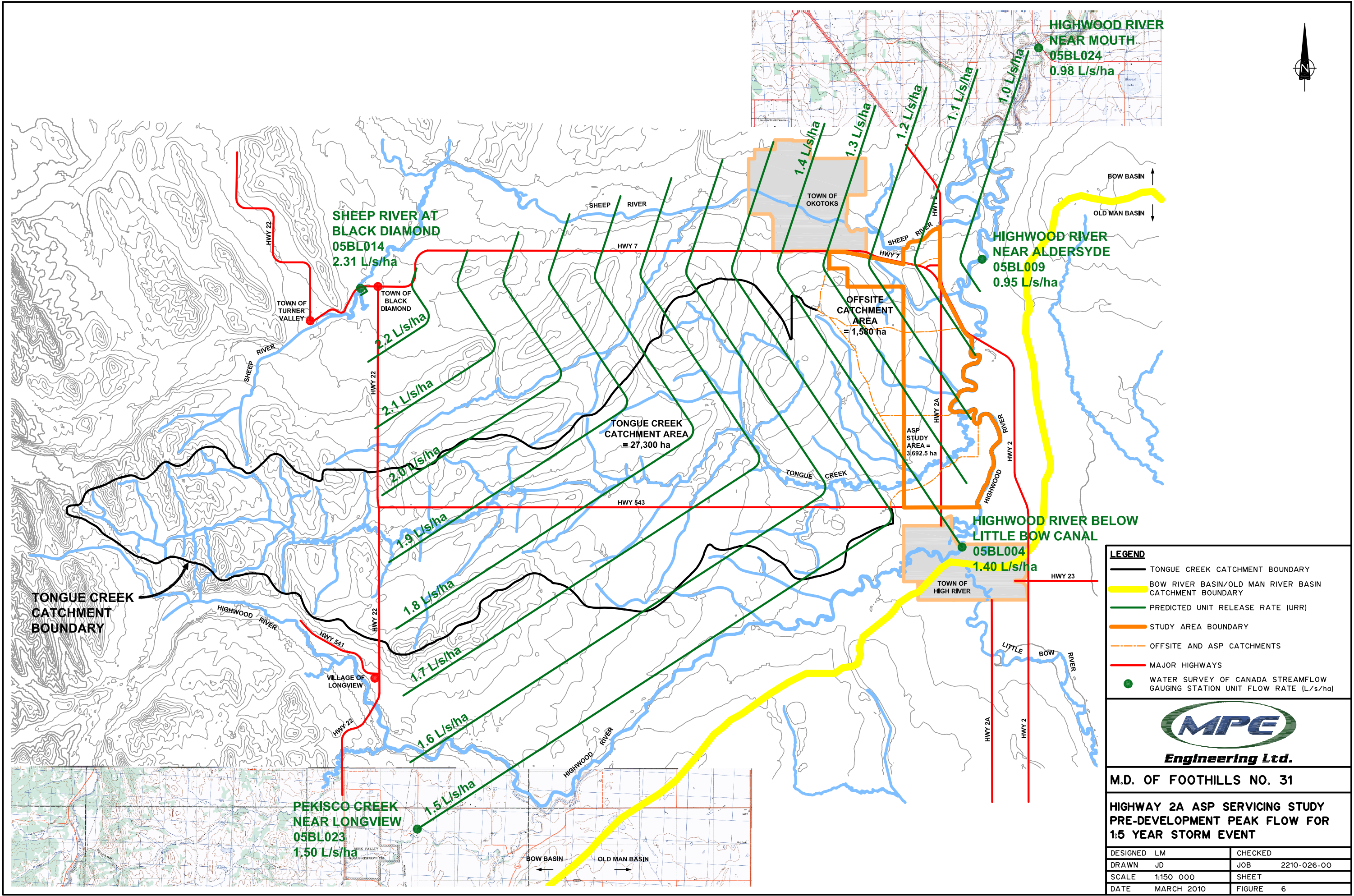
PLANNED DEVELOPMENT

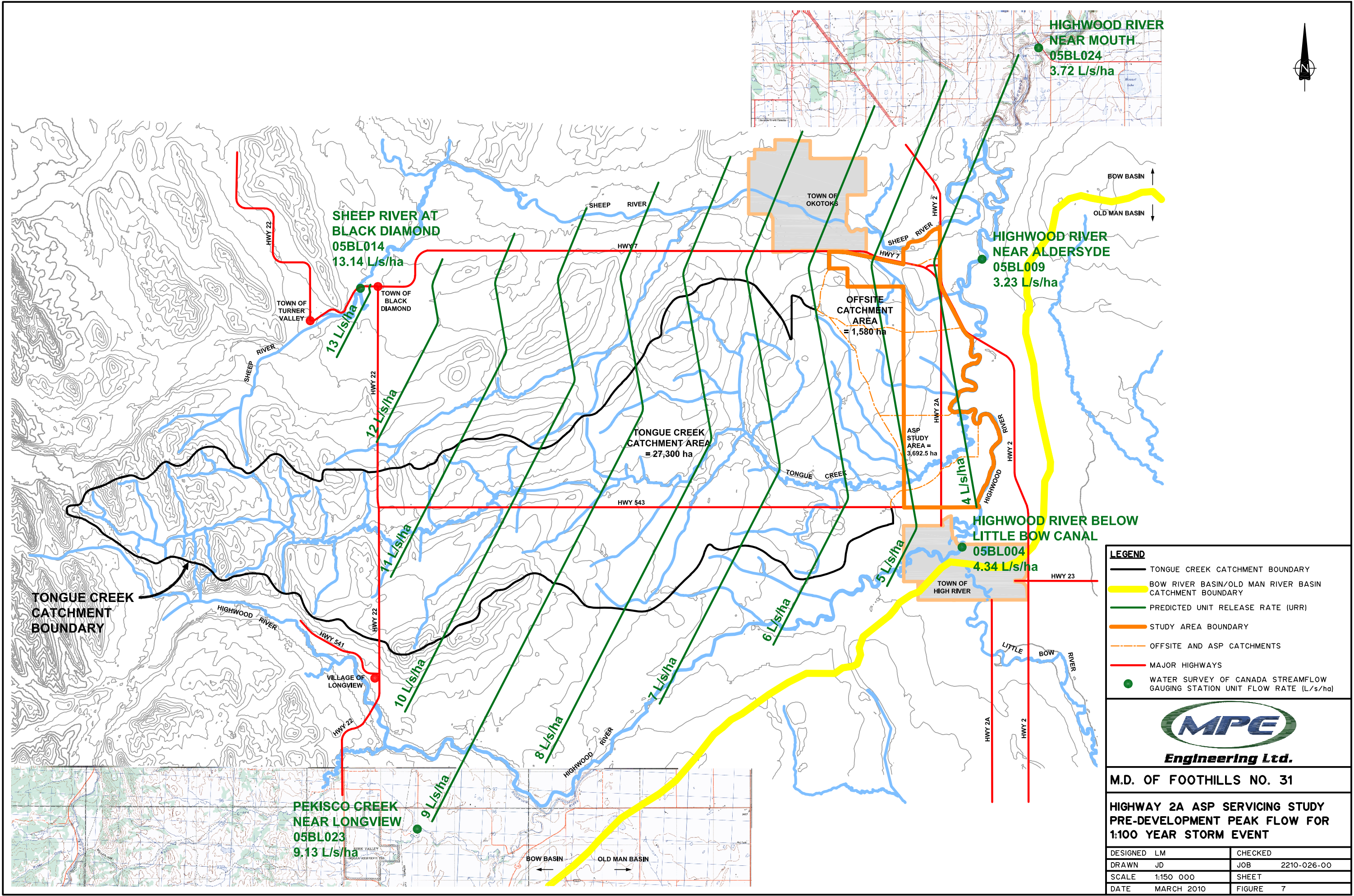
M.D. OF FOOTHILLS NO. 31

HIGHWAY 2A ASP SERVICING STUDY
POTENTIAL ULTIMATE LAND USAGE

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	5

NOTES:
1. DEVELOPMENT RESTRICTED AT STUDY BOUNDARY BY 30m BUFFER.
2. AENV'S FLOOD RISK MAPPING INFORMATION FOR SECTIONS 23 AND 24 ALONG THE SHEEP RIVER, DOWNSTREAM OF OKOTOKS, ARE NOT SHOWN.

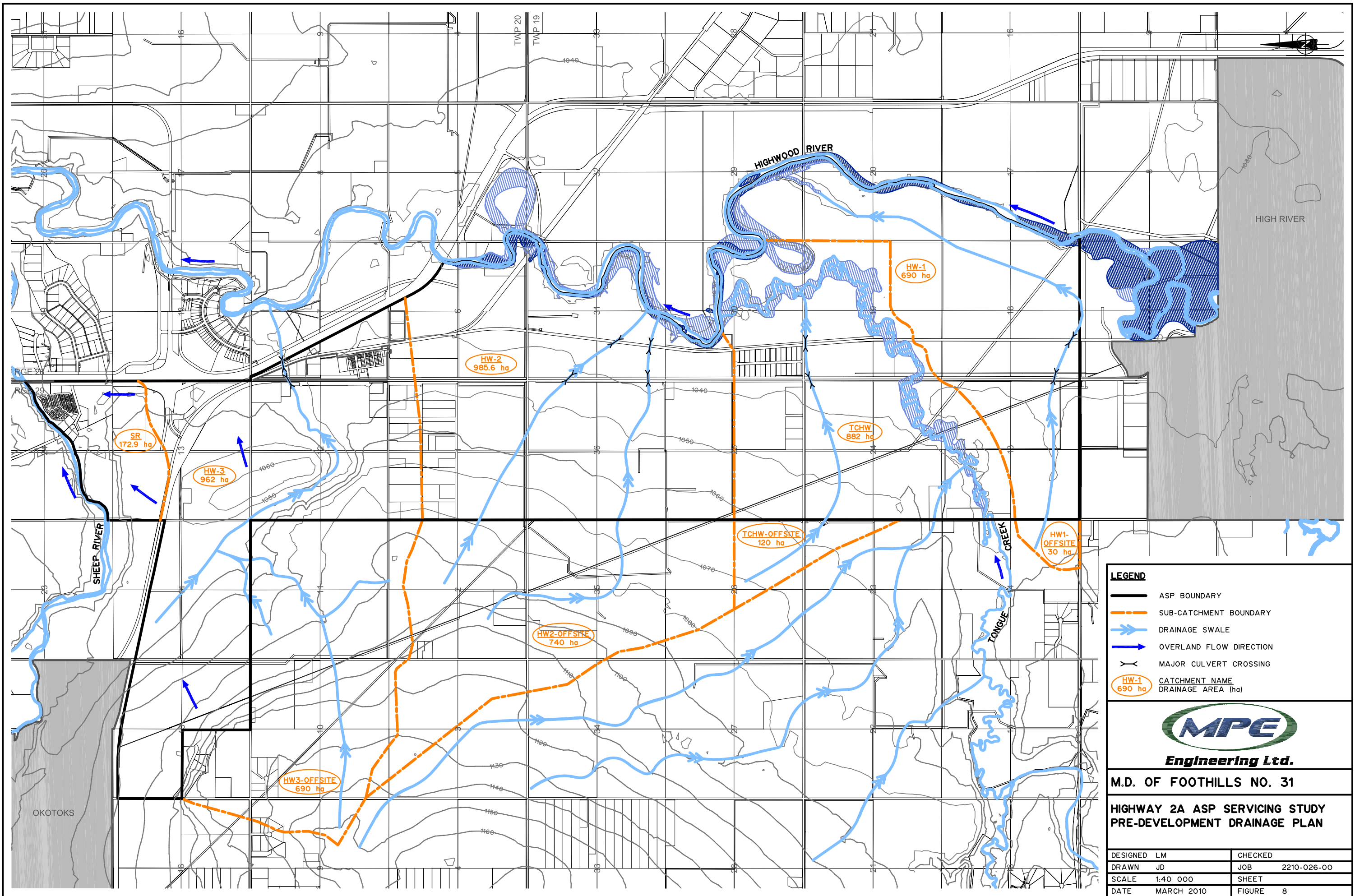




- LEGEND**
- TONGUE CREEK CATCHMENT BOUNDARY
 - BOW RIVER BASIN/OLD MAN RIVER BASIN CATCHMENT BOUNDARY
 - PREDICTED UNIT RELEASE RATE (URR)
 - STUDY AREA BOUNDARY
 - OFFSITE AND ASP CATCHMENTS
 - MAJOR HIGHWAYS
 - WATER SURVEY OF CANADA STREAMFLOW GAUGING STATION UNIT FLOW RATE (L/s/ha)



M.D. OF FOOTHILLS NO. 31			
HIGHWAY 2A ASP SERVICING STUDY PRE-DEVELOPMENT PEAK FLOW FOR 1:100 YEAR STORM EVENT			
DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:150 000	SHEET	
DATE	MARCH 2010	FIGURE	7



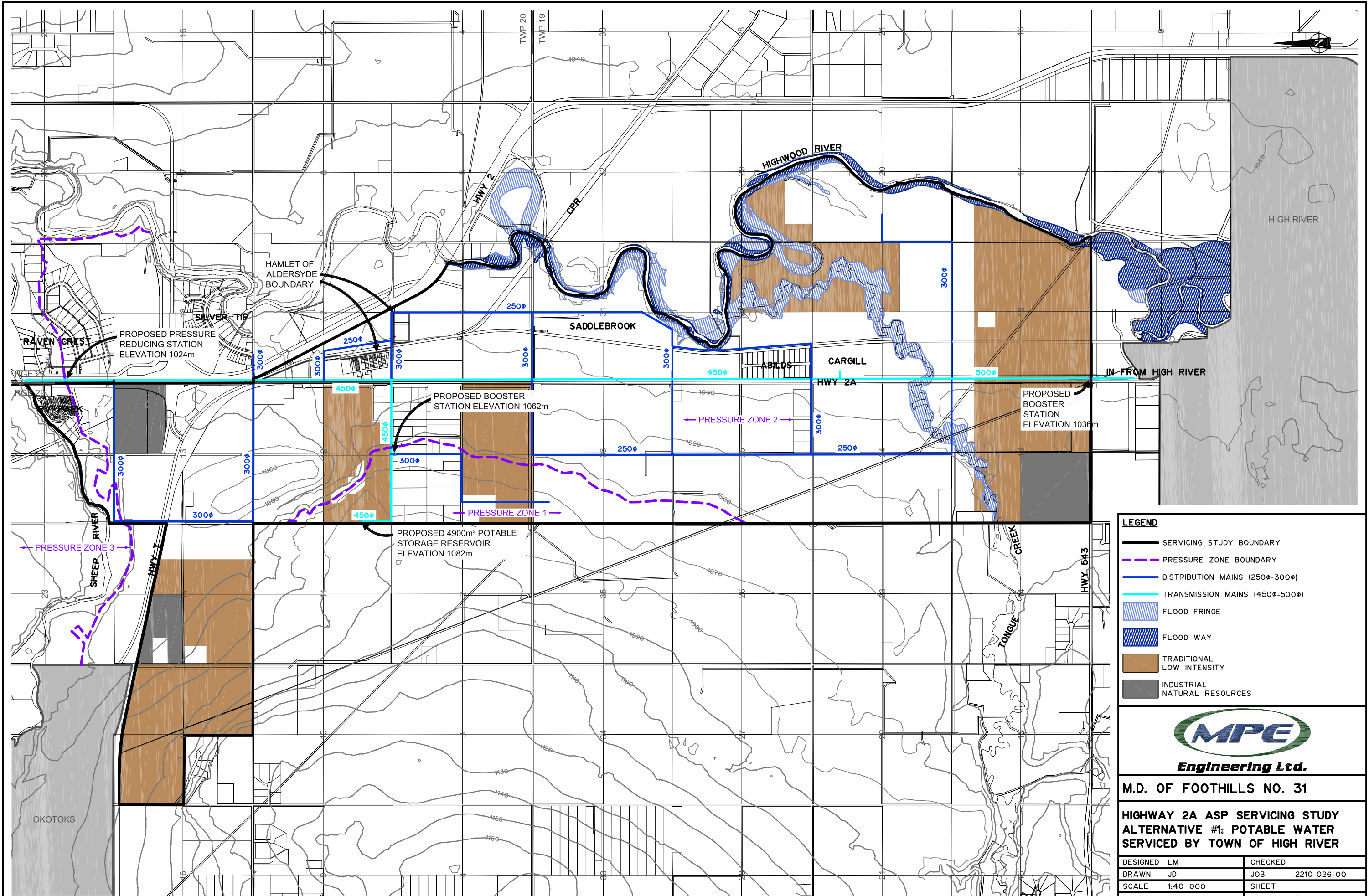
- LEGEND**
- ASP BOUNDARY
 - SUB-CATCHMENT BOUNDARY
 - DRAINAGE SWALE
 - OVERLAND FLOW DIRECTION
 - MAJOR CULVERT CROSSING
 - CATCHMENT NAME
DRAINAGE AREA (ha)



M.D. OF FOOTHILLS NO. 31

HIGHWAY 2A ASP SERVICING STUDY
PRE-DEVELOPMENT DRAINAGE PLAN

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	8



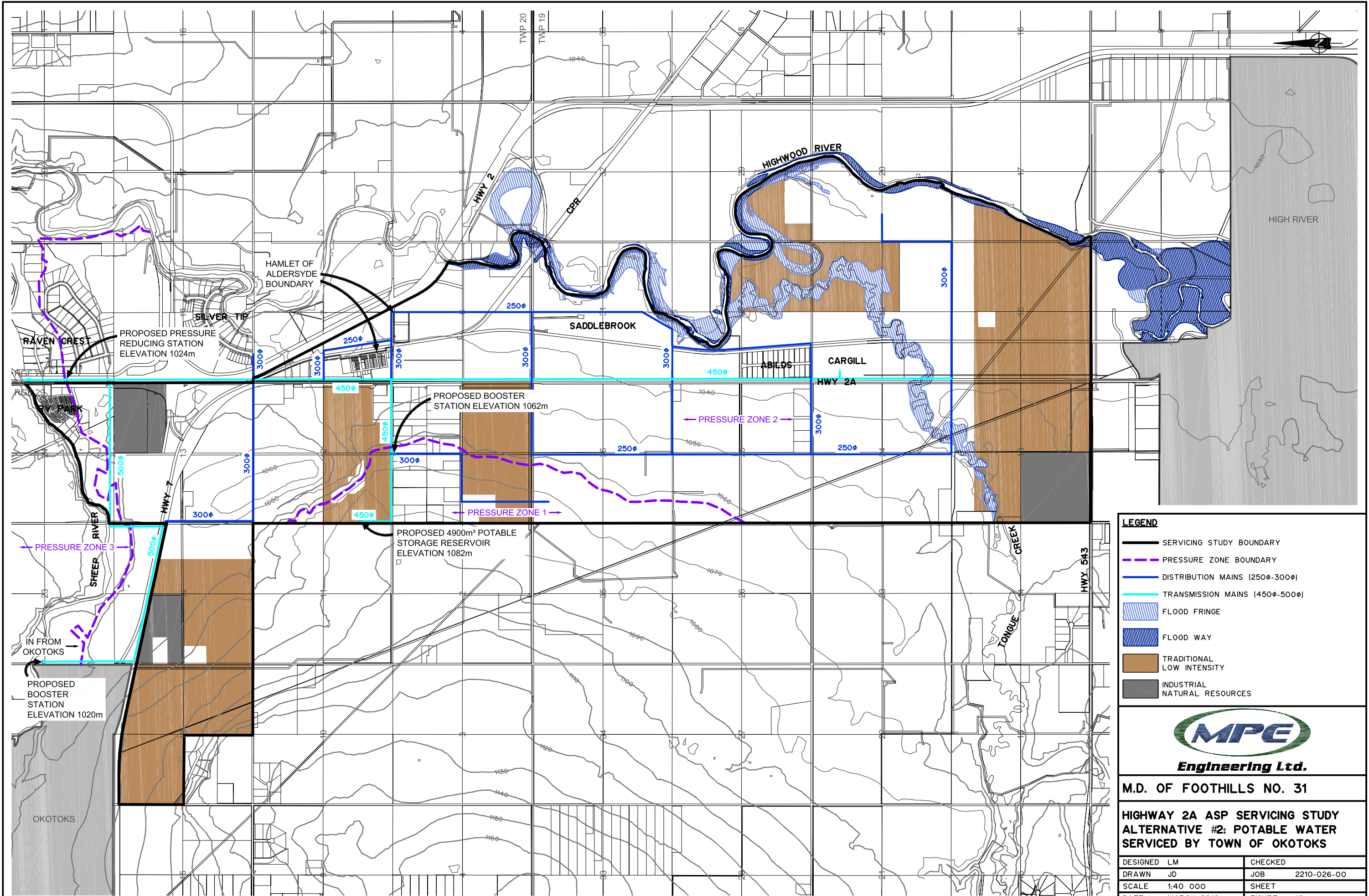
- LEGEND**
- SERVICING STUDY BOUNDARY
 - PRESSURE ZONE BOUNDARY
 - DISTRIBUTION MAINS (250-300mm)
 - TRANSMISSION MAINS (450-500mm)
 - FLOOD FRINGE
 - FLOOD WAY
 - TRADITIONAL LOW INTENSITY
 - INDUSTRIAL NATURAL RESOURCES



M.D. OF FOOTHILLS NO. 31

HIGHWAY 2A ASP SERVICING STUDY
ALTERNATIVE #1: POTABLE WATER
SERVICED BY TOWN OF HIGH RIVER

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	9



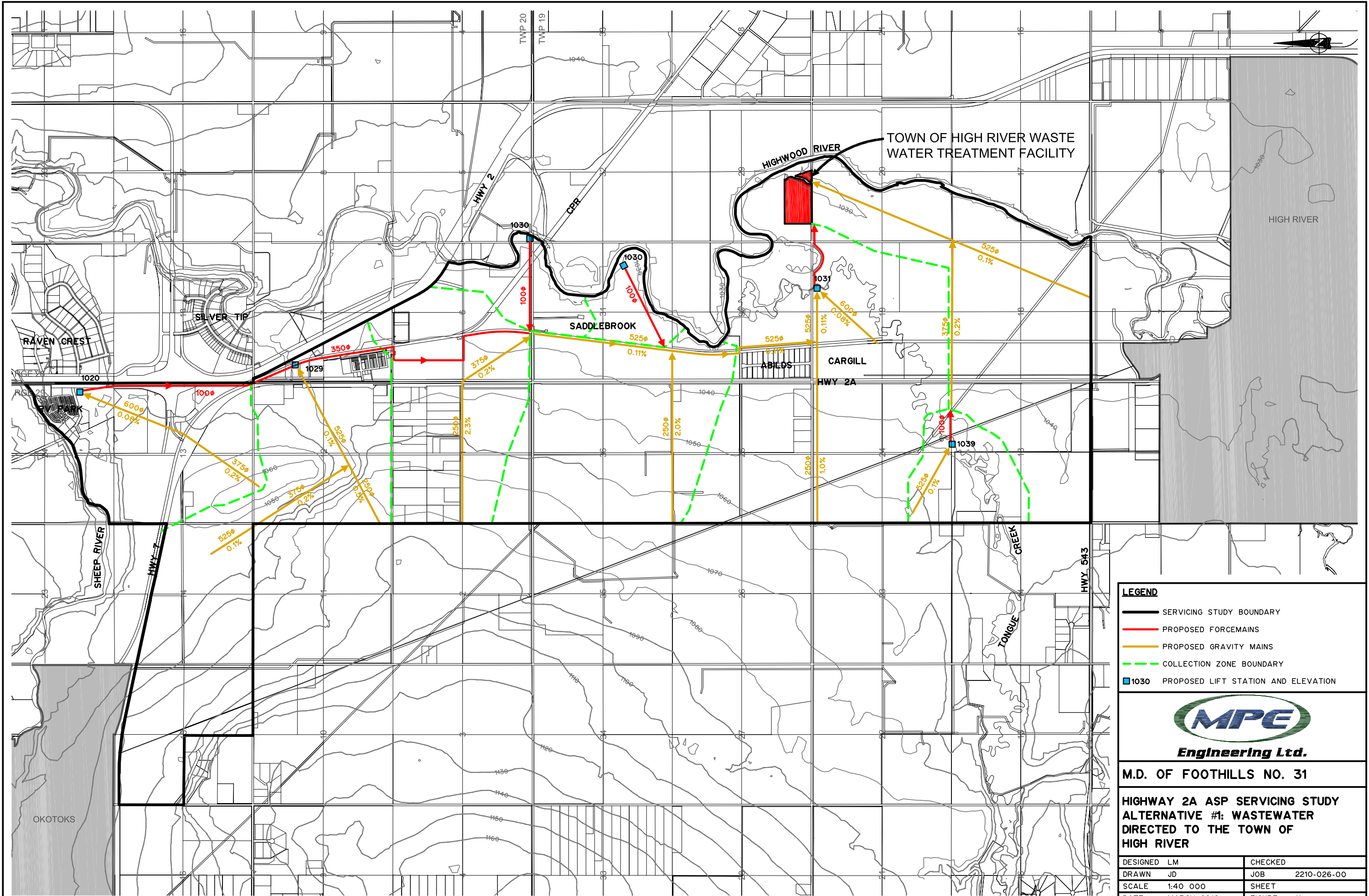
- LEGEND**
- SERVICING STUDY BOUNDARY
 - PRESSURE ZONE BOUNDARY
 - DISTRIBUTION MAINS (250φ-300φ)
 - TRANSMISSION MAINS (450φ-500φ)
 - FLOOD FRINGE
 - FLOOD WAY
 - TRADITIONAL LOW INTENSITY
 - INDUSTRIAL NATURAL RESOURCES



M.D. OF FOOTHILLS NO. 31

HIGHWAY 2A ASP SERVICING STUDY
ALTERNATIVE #2: POTABLE WATER
SERVICED BY TOWN OF OKOTOKS

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	10



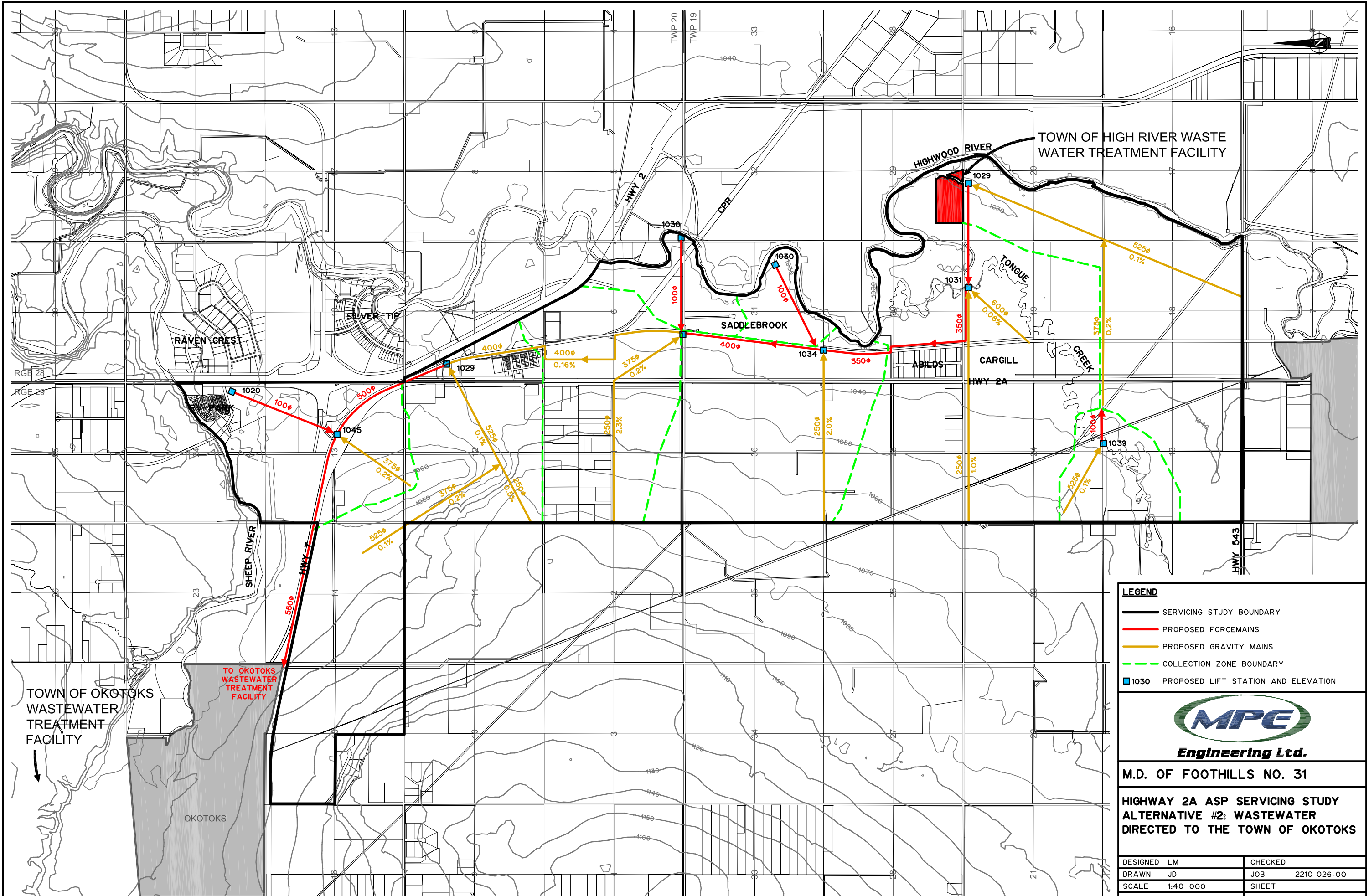
- LEGEND**
- SERVICING STUDY BOUNDARY
 - PROPOSED FORCEMAINS
 - PROPOSED GRAVITY MAINS
 - COLLECTION ZONE BOUNDARY
 - 1030 PROPOSED LIFT STATION AND ELEVATION



M.D. OF FOOTHILLS NO. 31

HIGHWAY 2A ASP SERVICING STUDY
ALTERNATIVE #1: WASTEWATER
DIRECTED TO THE TOWN OF
HIGH RIVER

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	11



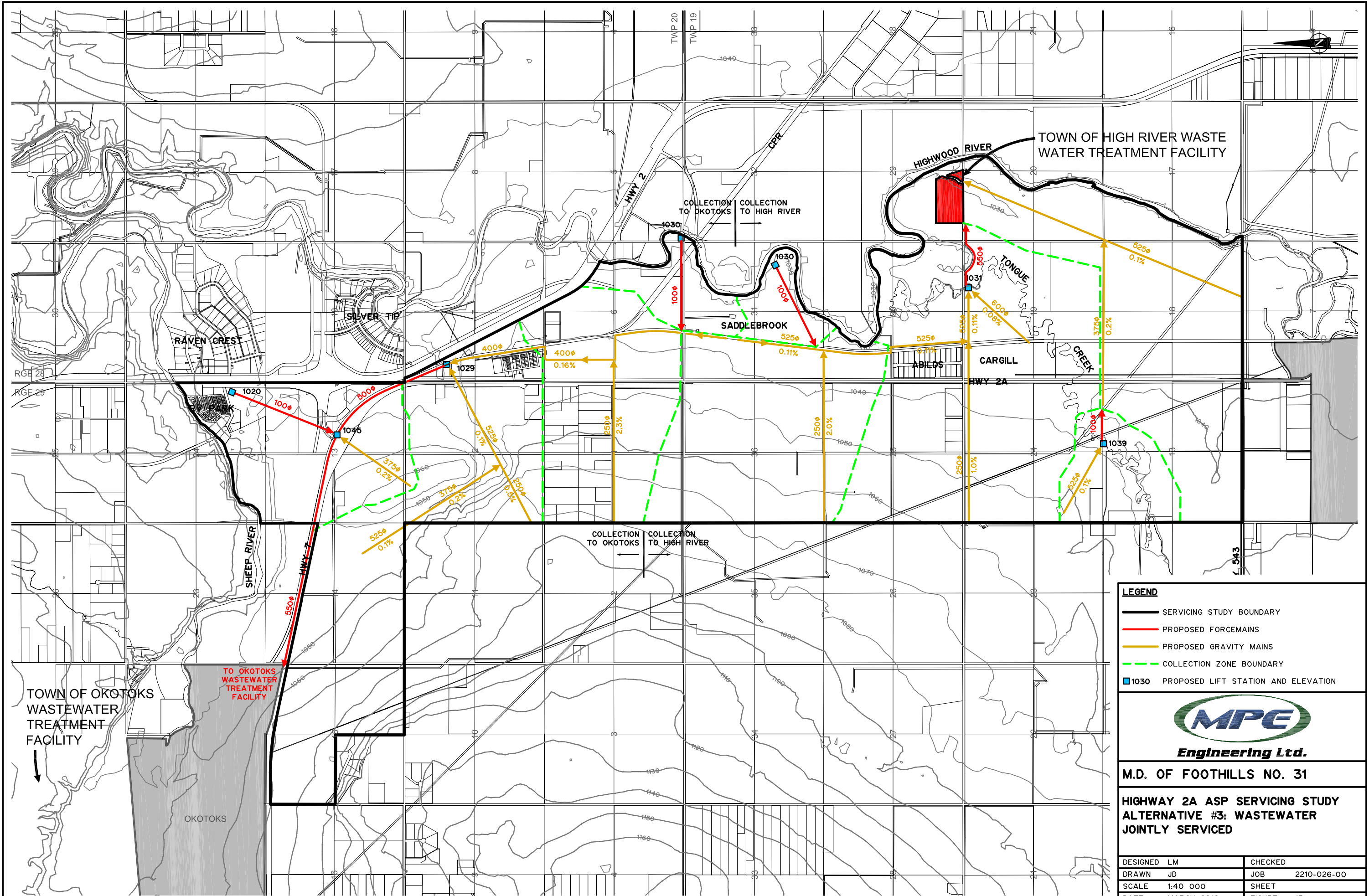
- LEGEND**
- SERVICING STUDY BOUNDARY
 - PROPOSED FORCEMAINS
 - PROPOSED GRAVITY MAINS
 - COLLECTION ZONE BOUNDARY
 - 1030 PROPOSED LIFT STATION AND ELEVATION



M.D. OF FOOTHILLS NO. 31

HIGHWAY 2A ASP SERVICING STUDY
ALTERNATIVE #2: WASTEWATER
DIRECTED TO THE TOWN OF OKOTOKS

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	12



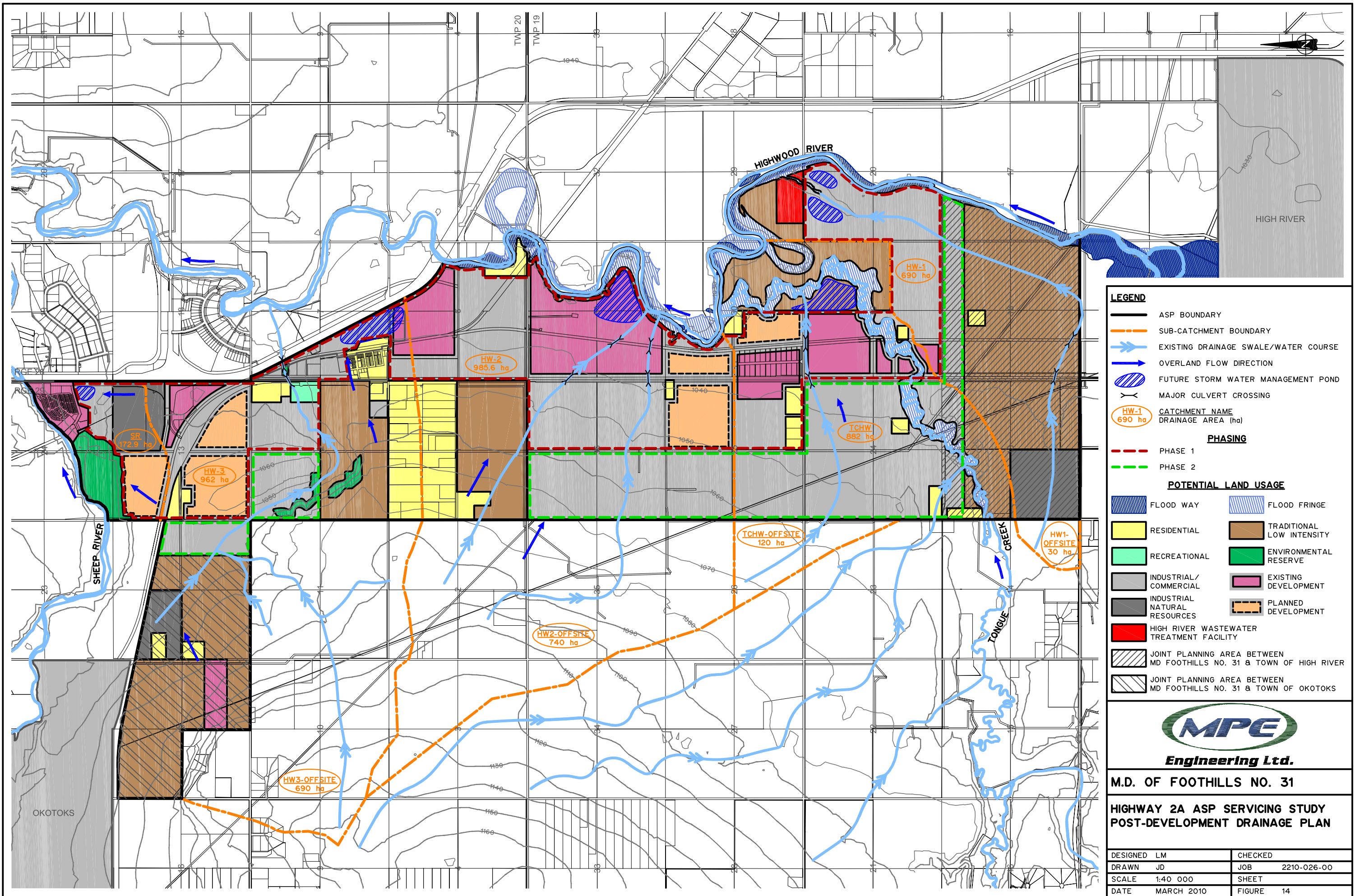
- LEGEND**
- SERVICING STUDY BOUNDARY
 - PROPOSED FORCEMAINS
 - PROPOSED GRAVITY MAINS
 - COLLECTION ZONE BOUNDARY
 - 1030 PROPOSED LIFT STATION AND ELEVATION



M.D. OF FOOTHILLS NO. 31

HIGHWAY 2A ASP SERVICING STUDY
ALTERNATIVE #3: WASTEWATER
JOINTLY SERVICED

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	13



LEGEND

- ASP BOUNDARY
- SUB-CATCHMENT BOUNDARY
- EXISTING DRAINAGE SWALE/WATER COURSE
- OVERLAND FLOW DIRECTION
- FUTURE STORM WATER MANAGEMENT POND
- MAJOR CULVERT CROSSING
- CATCHMENT NAME
DRAINAGE AREA (ha)

PHASING

- PHASE 1
- PHASE 2

POTENTIAL LAND USAGE

- FLOOD WAY
- FLOOD FRINGE
- RESIDENTIAL
- RECREATIONAL
- INDUSTRIAL/COMMERCIAL
- INDUSTRIAL NATURAL RESOURCES
- HIGH RIVER WASTEWATER TREATMENT FACILITY
- JOINT PLANNING AREA BETWEEN MD FOOTHILLS NO. 31 & TOWN OF HIGH RIVER
- JOINT PLANNING AREA BETWEEN MD FOOTHILLS NO. 31 & TOWN OF OKOTOKS
- TRADITIONAL LOW INTENSITY
- ENVIRONMENTAL RESERVE
- EXISTING DEVELOPMENT
- PLANNED DEVELOPMENT



Engineering Ltd.

M.D. OF FOOTHILLS NO. 31

**HIGHWAY 2A ASP SERVICING STUDY
POST-DEVELOPMENT DRAINAGE PLAN**

DESIGNED	LM	CHECKED	
DRAWN	JD	JOB	2210-026-00
SCALE	1:40 000	SHEET	
DATE	MARCH 2010	FIGURE	14