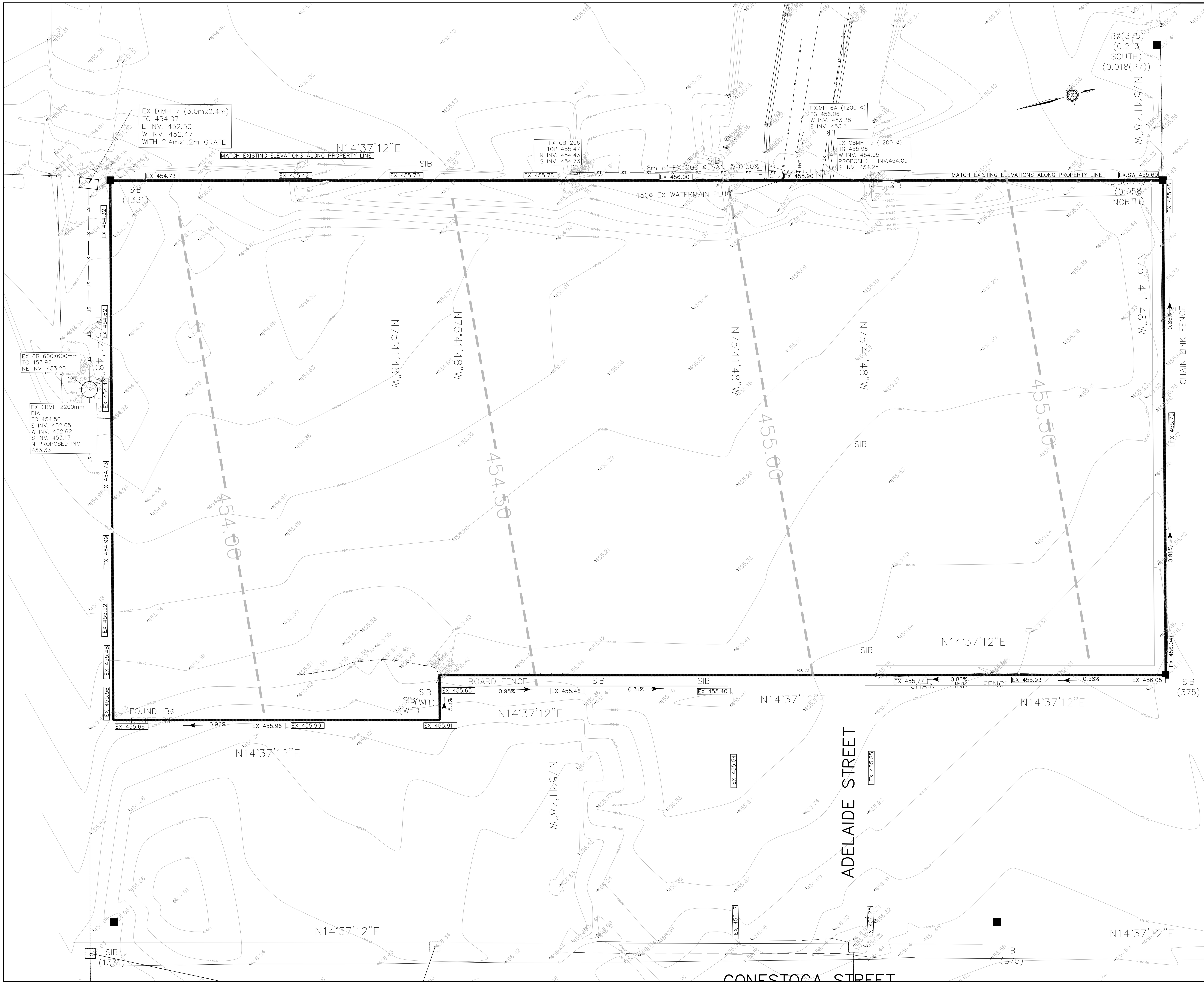

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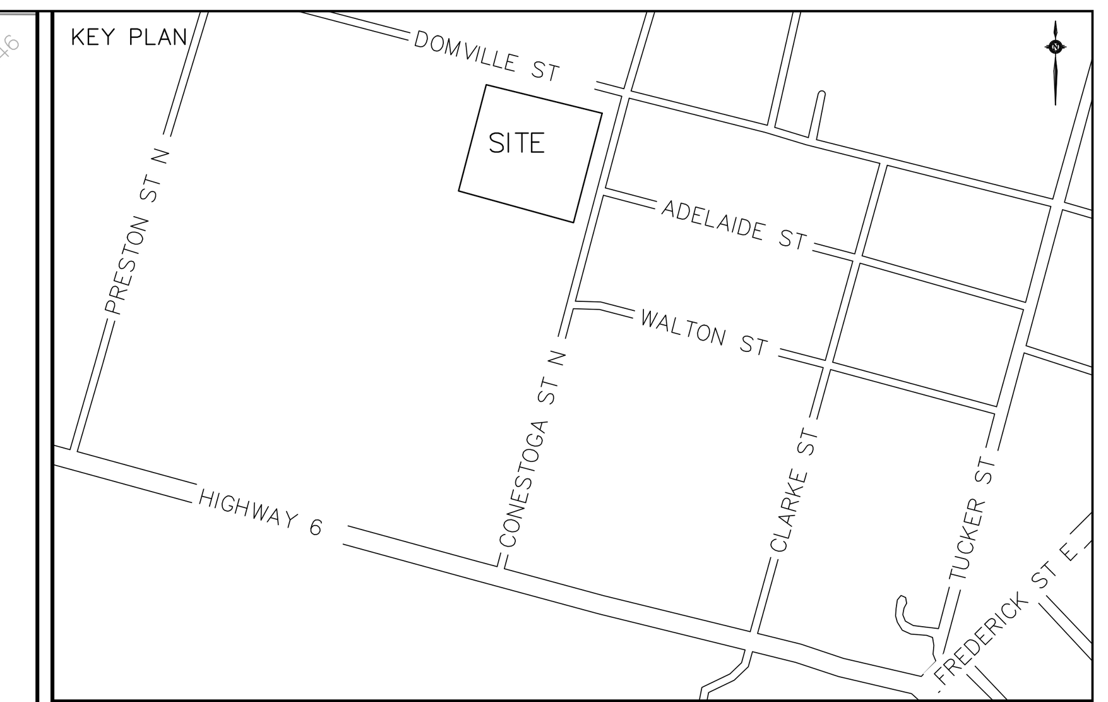

NOTES:

— SAN — SAN —	EXISTING SANITARY
— ST — ST —	EXISTING STORM
— W — W —	EXISTING WATERMAIN
— X — X —	REMOVALS
— x —	EXISTING FENCE
— H — H —	EXISTING HYDRO
— G — G —	EXISTING GAS
— BC — BC —	EXISTING BELL
	EXISTING DECIDUOUS TREE
	EXISTING CONIFEROUS TREE

No.	REVISIONS	BY	DATE
	CONSTRUCTION		
	TENDER		
	ISSUE FOR APPROVALS		
	ISSUE BLOCK		

VED HOMES
ARTHUR, ONTARIO

PRELIMINARY SITE PLAN AND WATER TABLE CONTOURS

K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS AND PLANNERS
KITCHENER SUDBURY

LICENSED PROFESSIONAL ENGINEER HOSSEIN MOAREFI 100162491 SEP 27/22 PROVINCE OF ONTARIO

CERTIFIED ENGINEERING TECHNOLOGIST OACETT ONTARIO KEVIN DEATH № 050753

DESIGNED BY: HM	0 10 20	DATE: SEP 27 2022	
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CHECKED BY: KD		1 OF 4	
FILE No. 22-087	REVISION No.		

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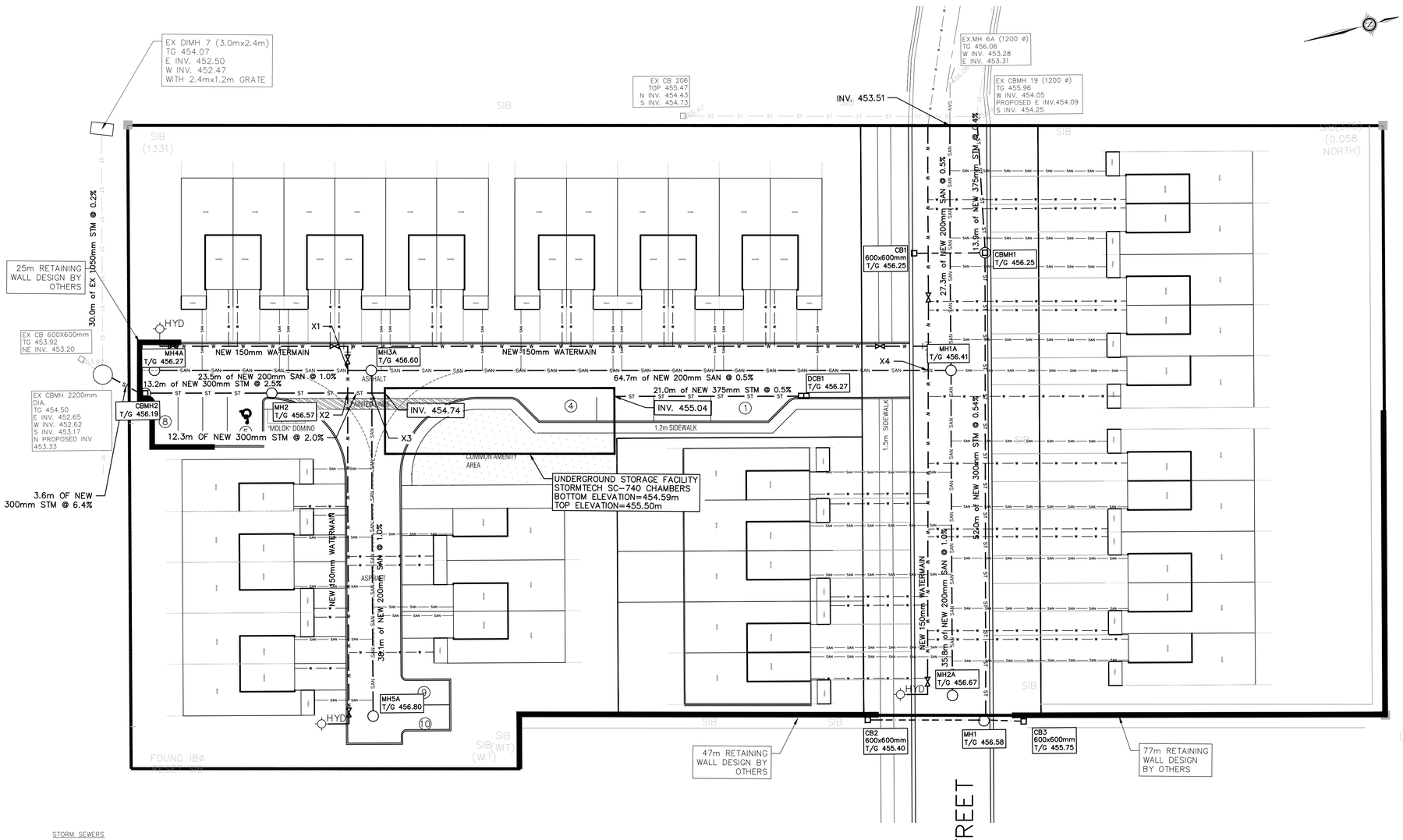

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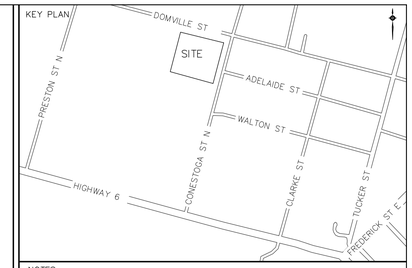

NOTES:

SAN SAN	EXISTING SANITARY
ST ST	EXISTING STORM
W W	EXISTING WATERMAIN
SAN SAN	PROPOSED SANITARY
ST ST	PROPOSED STORM
W W	PROPOSED WATERMAIN

STORM INVERTS				
STRUCTURE	T/G	INVERT IN	INVERT OUT	COVER
CB2	455.40		454.68 N	0.46m
CB3	455.75		454.66 S	0.79m
MH1	456.58	454.62 N 454.62 S	454.56 W	1.66m
CBMH1	456.25	454.28 E 454.31 S	454.25 W	1.64m
CB1	456.25		454.50 N	1.50m
DCB1	456.27		455.15 S	0.75m
MH2	456.57	454.49 N	454.46 S	1.76m
CBMH2	456.19	454.13 N	453.56 S	1.76m

SANITARY INVERTS				
STRUCTURE	T/G	INVERT IN	INVERT OUT	COVER
MH5A	456.80		454.52 W	2.08m
MH4A	456.27		454.33 N	1.85m
MH3A	456.60	454.09 S 454.12 E	454.03 N	2.28m
MH1A	456.41	453.71 S 453.68 E	453.65 W	2.50m
MH2A	456.67		454.04 W	2.43m

No.	REVISIONS	BY	DATE
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	TENDER		
	ISSUE FOR APPROVALS		
	ISSUE BLOCK		

VED HOMES SUBDIVISION

ADELAIDE STREET EXTENSION, ARTHUR

COUNTY OF WELLINGTON TOWNSHIP OF WELLINGTON NORTH

PROPOSED SERVICING PLAN

K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS AND PLANNERS
KITCHENER SUDBURY

LICENSED PROFESSIONAL ENGINEER
HOSSEIN MOAREFI
100162491
SEP 27/22
PROVINCE OF ONTARIO

CERTIFIED ENGINEERING TECHNOLOGIST
OACETT ONTARIO
KEVIN DEATH
No 050753

STORM SEWERS

ALL MANHOLES AND CATCHBASIN MANHOLES ARE TO BE 1200mmø PRECAST AS PER OPSD 701.01

MANHOLE AND CATCHBASIN, FRAMES, GRATES, CASTINGS AND LIDS TO BE QUALITY GREY IRON ASTM A48 CLASS 30B.

STORM MANHOLE LIDS TO BE PER OPSD 401.010.

ALL CATCHASINS AND CATCHBASIN MANHOLES TO HAVE 600mm SUMP.

THE USE OF PROFILE PVC IS NOT PERMITTED WITHIN THE MUNICIPAL RIGHT OF WAY.

ALL STORM SEWER TO BE PVC SMOOTH WALL SDR 35

BEDDING COVER AND BACKFILL PER OPSD 802.01

INSULATION USED FOR FROST COVER – POLYSTYRENE FOAM BOARD SHALL BE USED FOR PIPE INSULATION AND MUST BE 25mm THICK FOR EVERY 300mm REDUCTION IN DEPTH OF COVER. IT MUST BE LAID IN 50mm THICKNESS WITH A WIDTH OF THE INSULATION THAT COMPLIES WITH SECTION 7.3.5.4 OF THE OBC.

2. SANITARY SEWERS

PVC SDR 35 AS PER OPSS 1841 FOR GRAVITY SEWERS, SAND OR GRANULAR 'A' BEDDING, GRANULAR 'B' BACKFILL

BEDDING, COVER AND BACKFILL OPSD 802.010, FERNCO COUPLERS TO BE USED

3. WATERMAIN

WATERMAIN SHALL BE CLASS 150 PCV C900 PIPE.

PIPE BEDDING FOR RIGID PIPE TO BE CLASS B AS PER OPSD 802.030. PIPE BEDDING FOR FLEXIBLE PIPE TO BE AS PER OPSD 802.010. BEDDING MATERIAL AND COVER MATERIAL TO BE GRANULAR A. TRENCH BACKFILL TO BE NATIVE MATERIAL REPLACED IN 300mm LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.

WATERMAIN VALVES, 100mm AND LARGER, SHALL BE AS PER AWWA C509 – MUELLER A2360-23 OR APPROVED EQUIVALENT (OPEN LEFT) INCLUDING VALVE BOX AND 2.3 KG ANODE.

PVC WATERMAIN SHALL HAVE TWU SOLID COPPER, AWG10 TRACER WIRE STRAPPED TO TOP AS PER DGSSMS STANDARDS AT 5 METRE INTERVALS.

ANODES CONNECTED TO EACH METALLIC FITTING USING BRASS GROUNDING CLAMPS, AND SHALL NOT BE ATTACHED TO TRACER WIRES, AND TRACER WIRE SHALL NOT BE CONNECTED TO WATERMAIN FITTINGS.

ALL METALLIC WATERMAIN FITTING AND APPUTENANCES ARE TO BE WRAPPED WITH AN APPROVED PETROLEUM SYSTEM.

ALL WATERMAINS AND SERVICES TO HAVE MINIMUM 2m COVER.

COUNTY OF WELLINGTON TO SUPPLY WATER METER. CONTRACTOR TO INSTALL METER. ALL VALVES, PIPING AND REMOTE METER READOUT AT LOCATION ON BUILDING EXTERIOR ACCEPTABLE TO THE COUNTY.

BACKFLOW PREVENTION DEVICES ARE REQUIRED AT THE WATER METER AND OTHER LOCATION AS NECESSARY IN ACCORDANCE WITH CSA AND OBC REGULATIONS. DEVICES TO BE TESTED ANNUALLY BY A LICENSED PLUMBER WITH A COPY OF THE CERTIFICATION REPORT SUBMITTED TO THE TOWNSHIP.

SERVICE PROVIDING FIRE FLOWS MUST BE PRESSURE TESTED TO 200psi AS PER OBC PLUMBING CODE.

WATER SERVICE TESTING AND COMMISSIONING SHALL COMPLY WITH DGSSMS SECTION D.2.8. 'COMMISSIONING'.

THE DESIGN, CONSTRUCTION, INSTALLATION AND TESTING OF WATERMAIN AND SERVICE PIPING SHALL BE IN CONFORMANCE WITH OPSS 441.

THE TRENCH SHALL BE BACKFILLED BETWEEN JOINTS BEFORE TESTING TO PREVENT MOVEMENT OF PIPE.

THE AMOUNT OF LEAKAGE SHALL NOT EXEED THE ALLOWABLE LEAKAGE SPECIFIED IN OPSS 441.

ALL CONTROL VALVES SHALL BE FULLY CLOSED AND OPENED UNDER SYSTEM WATER PRESSURE TO ENSURE PROPER OPERATION.

PRESSURE LEAKAGE TEST SHALL BE PERFOMED BY THE CONTRACTOR IN THE PRESENCE OF THE CONSULTING ENGINEER.

CERTIFICATION SHALL BE COMPLETED BY THE CONSULTANT INDICATING THE TESTS WERE COMPLETED AND PASSED, AND SUBMITTED TO THE ENGINEERING SERVICES INSPECTOR.

THE COMMISSIONING PLAN MUST BE SUBMITTED TO THE PWS WATER SERVICES FOR APPROVAL PRIOR TO CONSTRUCTION.

PIPE CROSSING CLEARANCES			
CROSSING ID	BOTTOM PIPE	TOP PIPE	CLEARANCE
X1	OBV 454.31 STM	WTM	
X2	WTM	INV 454.66 STM	
X3	OBV 454.34 SAN	INV 454.71 STM	0.37m
X4	OBV 453.90 SAN	WTM	

DESIGNED BY:	HM
CHECKED BY:	KD
DRAWN BY:	CN
CHECKED BY:	KD
FILE No.	22-087

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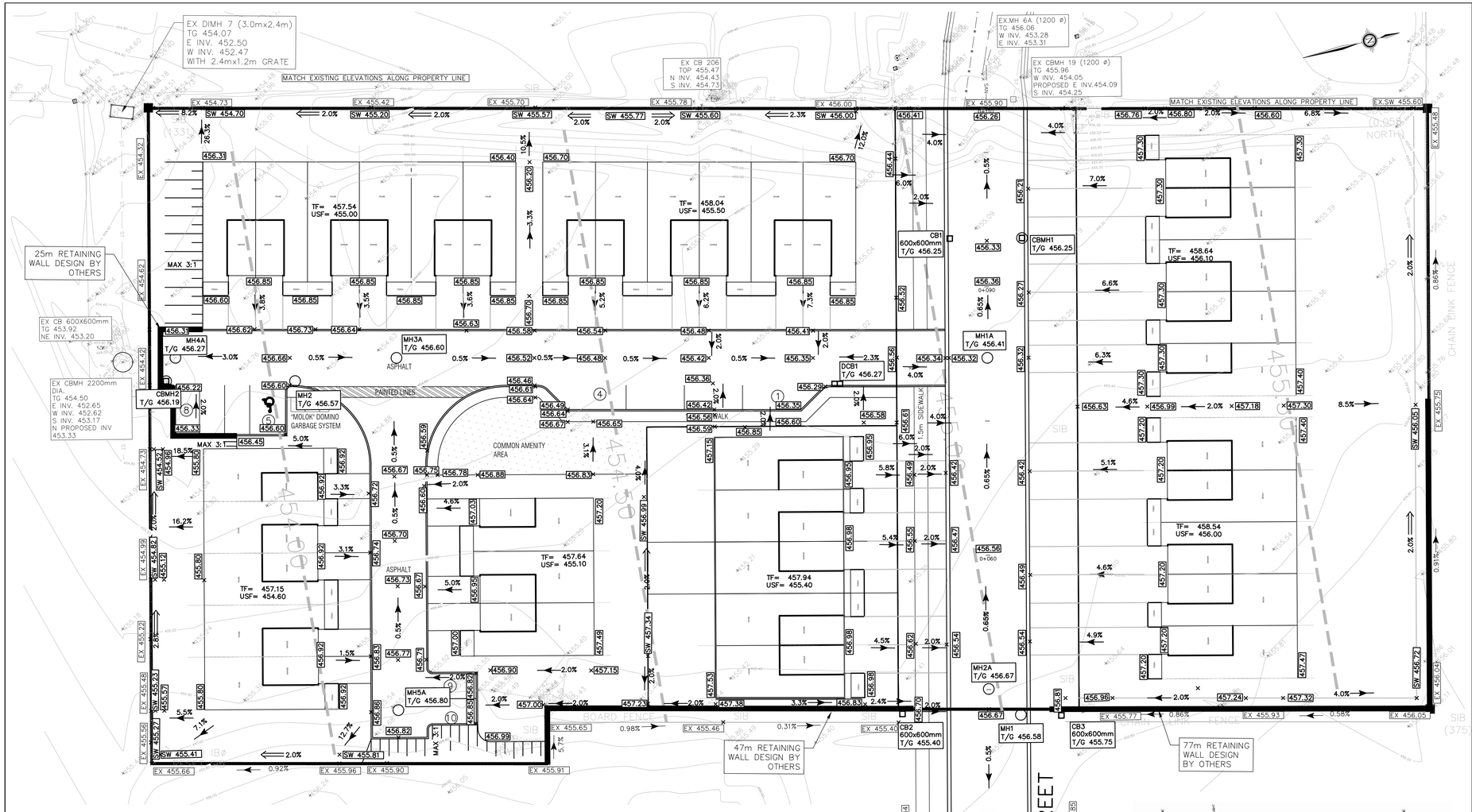
DATE: SEP 27 2022

SHEET 2 OF 4



TOWNSHIP OF WELLINGTON NORTH — DATE: OCTOBER, 2016 — REV: 2
STANDARD CROSS-SECTION
LOCAL STREET – 20.0m R.O.W. — STD. **R1**

CONSTRUCTION NOTES AND SPECIFICATIONS

1. GENERAL

THIS PLAN NOT FOR CONSTRUCTION UNTIL SIGNED AND SEALED BY ENGINEER AND APPROVED BY THE COUNTY OF WELLINGTON AND THE TOWNSHIP OF WELLINGTON NORTH.

THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE EXISTING CONDITIONS PLAN, GRADING PLAN, LANDSCAPE PLAN AND STORM WATER MANAGEMENT REPORT.

THIS PLAN IS TO BE USED FOR SERVICING AND GRADING ONLY; ANY OTHER INFORMATION SHOWN IS FOR ILLUSTRATION PURPOSES ONLY. THIS PLAN MUST NOT BE USED TO SITE THE PROPOSED BUILDING.

NO CHANGES ARE TO BE MADE WITHOUT NOTIFICATION TO COUNTY OF WELLINGTON PROJECT MANAGER AND THE APPROVAL OF THE DESIGN ENGINEER.

ENGINEERING ACCEPTANCE OF THIS PLAN DOES NOT EXEMPT THE OWNER'S BONDED CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS AND ADDITIONAL APPROVALS REQUIRED TO COMPLETE THE PROJECT.

THIS PLAN NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE PERMISSION OF K. SMART ASSOCIATES LIMITED.

PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST:

CHECK AND VERIFY ALL EXISTING CONDITIONS, LOCATIONS AND ELEVATIONS WHICH INCLUDES BUT IS NOT LIMITED TO THE BENCHMARK ELEVATIONS, EXISTING SERVICE CONNECTIONS AND EXISTING INVERTS. REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING.

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

VERIFY THAT THE FINISHED FLOOR ELEVATIONS (WHICH MAY APPEAR ON THIS PLAN) COMPLY WITH THE FINAL ARCHITECTURAL DRAWINGS.

CONFIRM ALL DRAWINGS USED FOR CONSTRUCTION ARE OF THE MOST RECENT REVISION.

CONTRACTOR IS RESPONSIBLE FOR RESTORING ALL AFFECTED PROPERTY TO ORIGINAL CONDITIONS AT OWNER'S EXPENSE.

ALL SERVICE CONNECTIONS TO THE PROPERTY LINE MUST BE INSTALLED WITHIN THE RIGHT-OF-WAY TO CITY'S SATISFACTION PRIOR TO ANY INTERNAL SERVICING WORKS.

ALL UNDERGROUND SERVICES ARE TO BE CONSTRUCTED IN FULL COMPLIANCE WITH THE ONTARIO BUILDING CODE (PART 7, PLUMBING), THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) AND IN COMPLIANCE WITH LOCAL APPLICABLE CODES AND REGULATIONS; WHICH CODES AND REGULATIONS SHALL SUPERSEDE ALL OTHERS.

CONTRACTOR IS RESPONSIBLE FOR CONTACTING ENGINEER 48 HOURS PRIOR TO COMMENCING WORK TO ARRANGE FOR INSPECTION, ENGINEER TO DETERMINE DEGREE OF INSPECTION AND TESTING REQUIRED FOR CERTIFICATION OF UNDERGROUND SERVICE INSTALLATION AS MANDATED BY ONTARIO BUILDING CODE SECTION 2.3.2. FAILURE TO NOTIFY ENGINEER WILL RESULT IN EXTENSIVE POST CONSTRUCTION INSPECTION AT CONTRACTOR'S EXPENSE.

IF, FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE MUST ENCROACH ON PRIVATE LAND TO UNDERTAKE ANY WORK, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE PROPERTY OWNER. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE ENGINEERING AND CONSTRUCTION DIVISION PRIOR TO ANY WORK BEING PERFORMED. THE COUNTY OF WELLINGTON DOES NOT PERMIT THE USE OF ANY ADJACENT PROPERTY FOR THE USE OF CONSTRUCTION.

LEGAL INFORMATION OBTAINED FROM SITE PLAN.

CONTRACTOR TO INSTALL EROSION CONTROL MEASURES AS SHOWN PRIOR TO CONSTRUCTION AND MAINTAIN IN GOOD CONDITION UNTIL CONSTRUCTION IS COMPLETED AND VEGETATIVE COVER IS ESTABLISHED.

SITE SERVICING CONTRACTOR TO TERMINATE ALL SERVICES 1.0 METRE FROM FOUNDATION WALL.

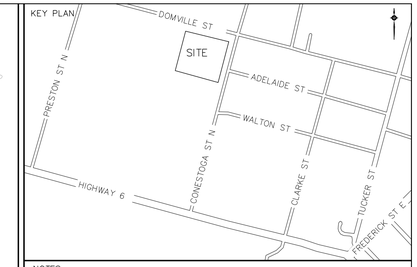
FILTER FABRIC TO BE TERRAFIX 200R OR APPROVED EQUIVALENT.

GRASS SLOPES SHALL BE 4:1 WHEN POSSIBLE. MAXIMUM GRASSED SLOPE TO BE 3:1.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD INCLUDING THE SUPPLY, INSTALLATION AND REMOVAL OF ALL NECESSARY SIGNALS, DELINEATORS, MARKERS AND BARRIERS. ALL SIGNS, ETC. SHALL CONFORM TO THE STANDARDS OF THE LOCAL MUNICIPALITY AND THE MTO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

CONTRACTOR TO MAINTAIN SAFE WORKING CONDITIONS IN ALL EXCAVATIONS AND TRENCHES IN ACCORDANCE WITH THE CURRENT MINISTRY OF LABOUR REGULATIONS.

KEY PLAN



NOTES:

300.00	PROPOSED ELEVATION
T/G 300.00	PROPOSED TOP OF GRATE ELEVATION
SW 300.00	PROPOSED SWALE ELEVATION
→	PROPOSED SURFACE FLOW DIRECTION
⟹	PROPOSED SWALE FLOW DIRECTION
EX 300.00	EXISTING ELEVATION

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VED HOMES SUBDIVISION

ADELAIDE STREET EXTENSION, ARTHUR

COUNTY OF WELLINGTON TOWNSHIP OF WELLINGTON NORTH

PROPOSED GRADING PLAN

K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS AND PLANNERS
KITCHENER SUDBURY

LICENSED PROFESSIONAL ENGINEER — HOSSEIN MOAREFI — 100162491 — SEP 27/22 — PROVINCE OF ONTARIO

CERTIFIED ENGINEERING TECHNOLOGIST — OACETT — ONTARIO — KEVIN DEATH — No 050753

DESIGNED BY: KD	0 10 20	DATE: SEP 27 2022	
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DRAWN BY: LK			
CHECKED BY: KD	REVISION No.		
FILE No. 22-087			

C:\Users\LKRZNA~1\AppData\Local\Temp\AcPublish_24724\22-087 VED Homes, Arthur – KSA SEPT 20, 2022 NEW TOPO.dwg 3.GRADING 2-Nov-22 3:35:03 PM

EX DIMH 7 (3.0mx2.4m)
TG 454.07
E INV. 452.50
W INV. 452.47
WITH 2.4mx1.2m GRATE

MATCH EXISTING ELEVATIONS ALONG PROPERTY LINE

EX CB 206
TOP 455.47
N INV. 454.43
S INV. 454.73

INV. 453.51

EX.MH 6A (1200 ø)
TG 456.06
W INV. 453.28
E INV. 453.31

EX CBMH 19 (1200 ø)
TG 455.96
W INV. 454.05
PROPOSED E INV.454.09
S INV. 454.25

MATCH EXISTING ELEVATIONS ALONG PROPERTY LINE

EX CB 600X600mm
TG 453.92
NE INV. 453.20

EX CBMH 2200mm DIA.
TG 454.50
E INV. 452.65
W INV. 452.62
S INV. 453.17
N PROPOSED INV 453.33

MH3A T/G 456.60
MH4A T/G 456.27
MH1A T/G 456.41
MH2A T/G 456.67
MH5A T/G 456.80
MH T/G 456.58
CBMH1 T/G 456.27
DCB1 T/G 456.27
CB1 600x600mm T/G 456.25
CBMH1 T/G 456.25
CB2 600x600mm T/G 455.40
CB3 600x600mm T/G 455.75

TF= 457.54
USF= 455.00

TF= 458.04
USF= 455.50

TF= 458.64
USF= 456.10

TF= 458.54
USF= 456.00

TF= 457.64
USF= 455.10

TF= 457.15
USF= 454.60

TF= 457.94
USF= 455.40

SILT SACK TYP.

SILT FENCE TYP.

ASPHALT

PAINTED LINES

"MOLOK" DOMINO GARBAGE SYSTEM

COMMON AMENITY AREA

1.5m SIDEWALK

DELAIDE STREET EXTENSION

CHAIN LINK FENCE

BOARD FENCE

CHAIN LINK FENCE

ADELAIDE STREET

6mX10m MUD MAT TYP.

CONESTOGA STREET

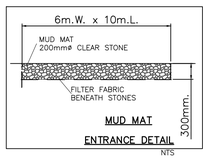
EROSION AND SEDIMENT CONTROL

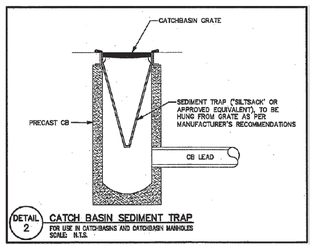
ALL SILT FENCING TO BE INSTALLED ALONG PROPERTY LINES PRIOR TO COMMENCEMENT OF ANY AREA GRADING, EXCAVATING OR DEMOLITION AND MAINTAIN IN GOOD CONDITION UNTIL CONSTRUCTION IS COMPLETED AND VEGETATIVE COVER IS ESTABLISHED.

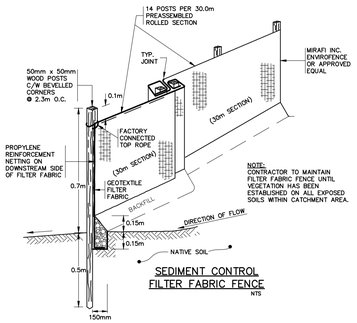
DURING CONSTRUCTION PHASE AND FOR POST PAVING STAGE, ALL CATCHBASIN AND CATCHBASIN MANHOLES TO BE PROTECTED BY SILT CLOTH INSTALLATION UNDER GRATE.

ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE DEVELOPMENT PROGRESSES. CONTRACTOR TO PROVIDE ALL ADDITIONAL EROSION CONTROL STRUCTURES.

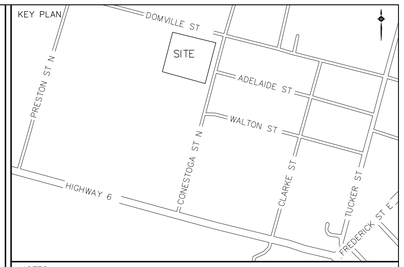
NOTE: IT IS THE SITE OWNERS' RESPONSIBILITY TO ENSURE THAT ALL SEDIMENT CONTROLS ARE IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH THE ABOVE CRITERIA.







KEY PLAN



NOTES:

PROPOSED SILT FENCE

PROPOSED SILT SACK

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VED HOMES SUBDIVISION

ADELAIDE STREET EXTENSION, ARTHUR

COUNTY OF WELLINGTON TOWNSHIP OF WELLINGTON NORTH

EROSION AND SEDIMENTATION CONTROL PLAN

K. SMART ASSOCIATES LIMITED
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LICENSED PROFESSIONAL ENGINEER
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