











SUPPLEMENTAL LEGEND:

-  RIP RAP OPSD 810.010 TYPE 'B' (SEE DETAIL)
-  GORE AREA (SEE DETAIL)
-  HOT MIX ASPHALT MISCELLANEOUS
-  SOD
-  FIBRE TUBE FLOW CHECK OPSD 219.191
-  TEMPORARY ROCK FLOW CHECK DAM OPSD 219.210, OPSD 219.211
-  BARRIER FOR TREE PROTECTION OPSD 220.010
-  HEAVY DUTY WIRE BACKED SILT FENCE OPSD 219.131
-  CB TO BE ADJUSTED
-  HIGH MAST LOCATION

NOTES:

1. DRAWINGS TO BE READ IN CONJUNCTION WITH:
-OPSD 100 & 200 SERIES
-TYPICALS AND DETAILS
2. ALL DISTURBED AREAS TO BE REINSTATED WITH
TOPSOIL, SEED AND MATRIX
3. ALL SUBDRAINS AND SUBDRAIN OUTLETS ARE TO BE
INSTALLED AS PER SUBDRAIN DETAILS
4. SILT FENCE TO BE INSTALLED AT RIP RAP
(SEWER/CULVERT OUTLET) AND WATERCOURSES AS PER
DETAILS
5. FOR CURB AND GUTTER, GUIDE RAIL, AND PAVEMENT
DETAILS AT STRUCTURES SEE STRUCTURE APPROACH
DETAIL
6. REINSTATEMENT RELATED TO CONSTRUCTION AND
TRAFFIC STAGING IS SHOWN ON STAGING DRAWINGS
7. MEDIAN BARRIER WALL TRANSITIONS AS PER DETAILS

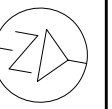
ABBREVIATIONS:

- EXIST. = EXISTING
- LTL = LEFT TURN LANE
- MED = MEDIAN
- PS = PAVED SHOULDER
- PPS = PARTIALLY PAVED SHOULDER
- RND = ROUNDING
- RTL = RIGHT TURN LANE
- SCL = SPEED CHANGE LANE
- WBSF = WIRE BACK SILT FENCE
- SBGR = STEEL BEAM GUIDERAIL,
OPSD 912.185
- SBEAT = STEEL BEAM ENERGY
ATTENUATING TERMINAL,
TYPE MGS

METRIC
DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00

NEW CONSTRUCTION
STA 13+900 TO STA 14+250
Survey JANUARY 2021 Revised ----

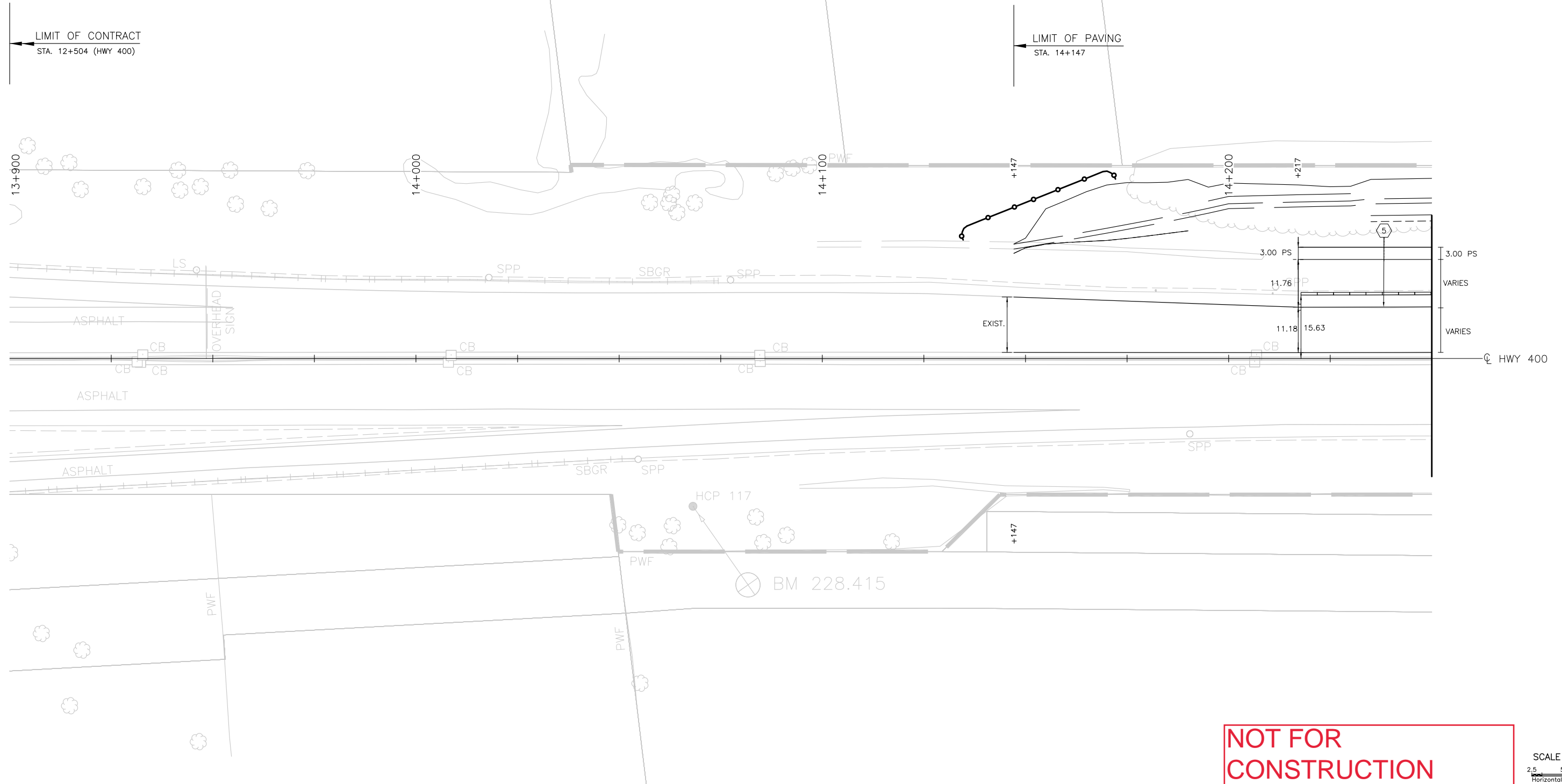


SHEET
410



MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05

MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY



DRAWING NAME: 1095_k400_nc.dwg
CREATED: November 12, 2023
MODIFIED: Wednesday, November 15, 2023 5:06:59 PM

**NOT FOR
CONSTRUCTION**

SCALE
2.5
Horizontal

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

MODIFIED: Wednesday, November 15, 2023 5:06:59 PM

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PLATE No
CONT XXXX-XXXX
WP 2331-16-00

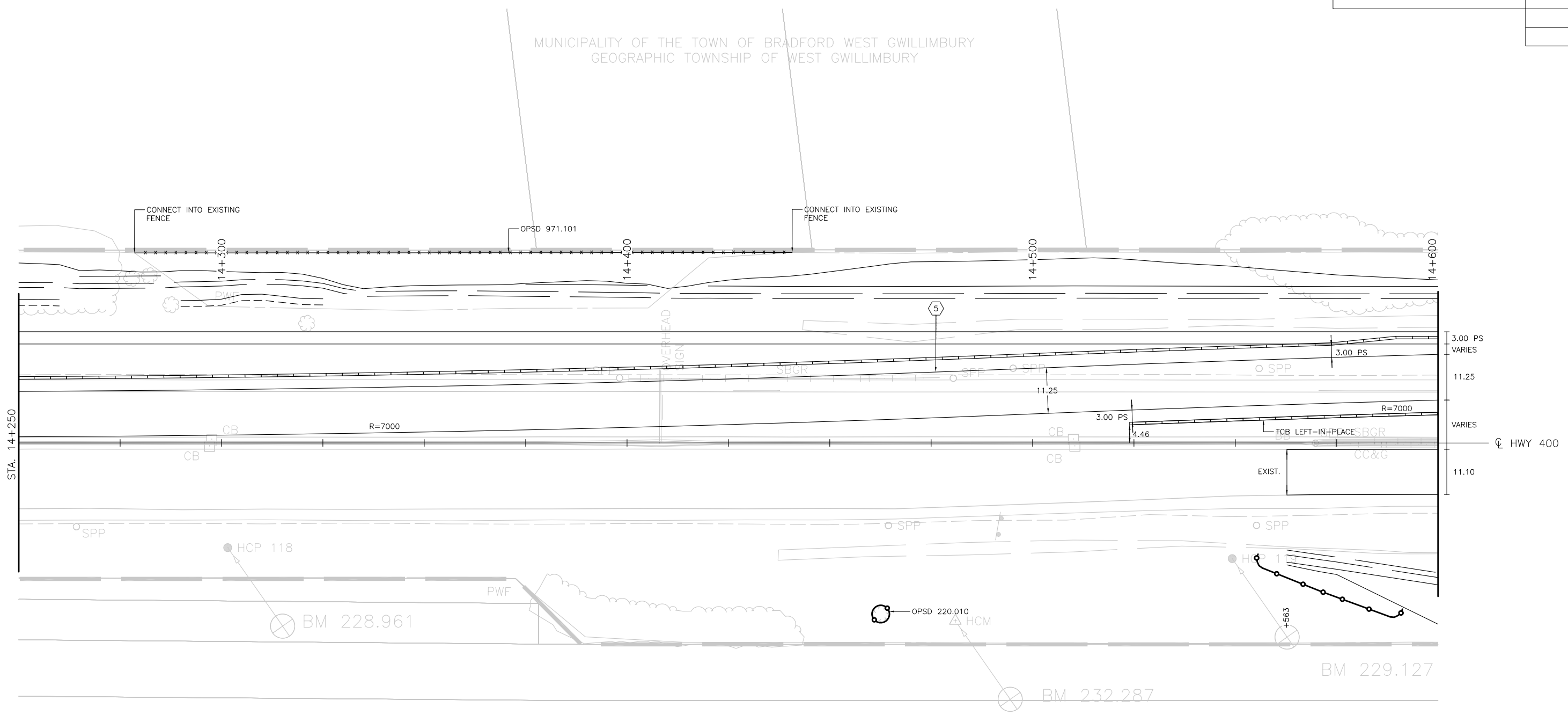


NEW CONSTRUCTION
STA 14+250 TO STA 14+600
Survey JANUARY 2021 Revised ----

SHEET
411



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY



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CONSTRUCTION**

SCALE
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UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00

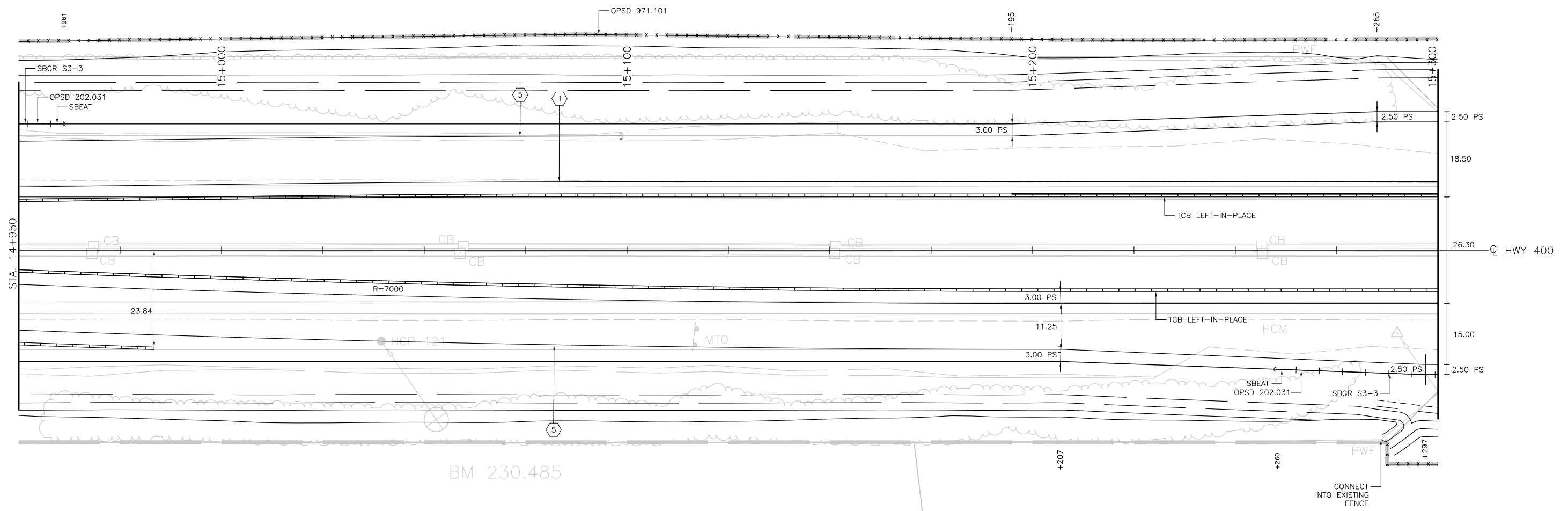


NEW CONSTRUCTION
STA 14+950 TO STA 15+300
Survey JANUARY 2021 Revised ----

SHEET
413



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY



**NOT FOR
CONSTRUCTION**

SCALE
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DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00

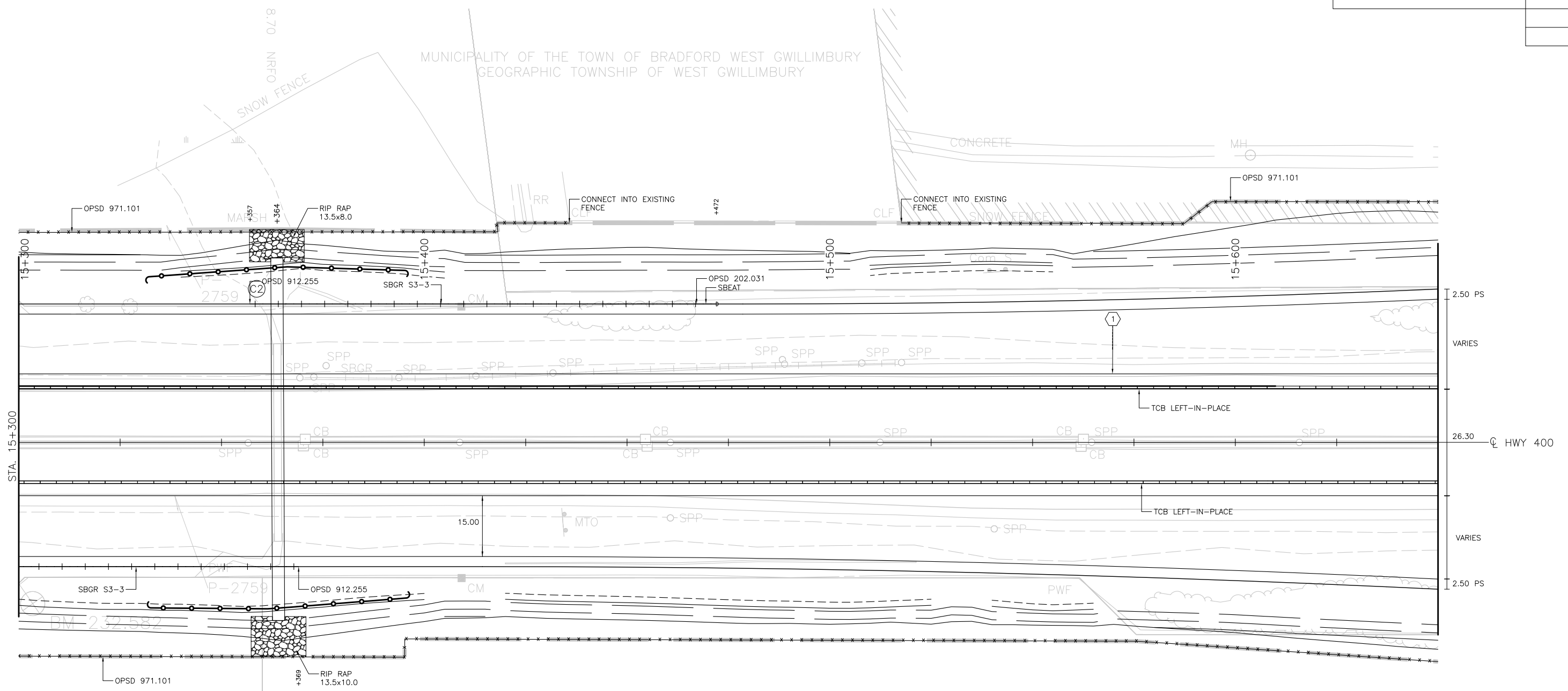


NEW CONSTRUCTION
STA 15+300 TO STA 15+650
Survey JANUARY 2021 Revised ----

SHEET
414



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY



**NOT FOR
CONSTRUCTION**

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UNLESS OTHERWISE SHOWN

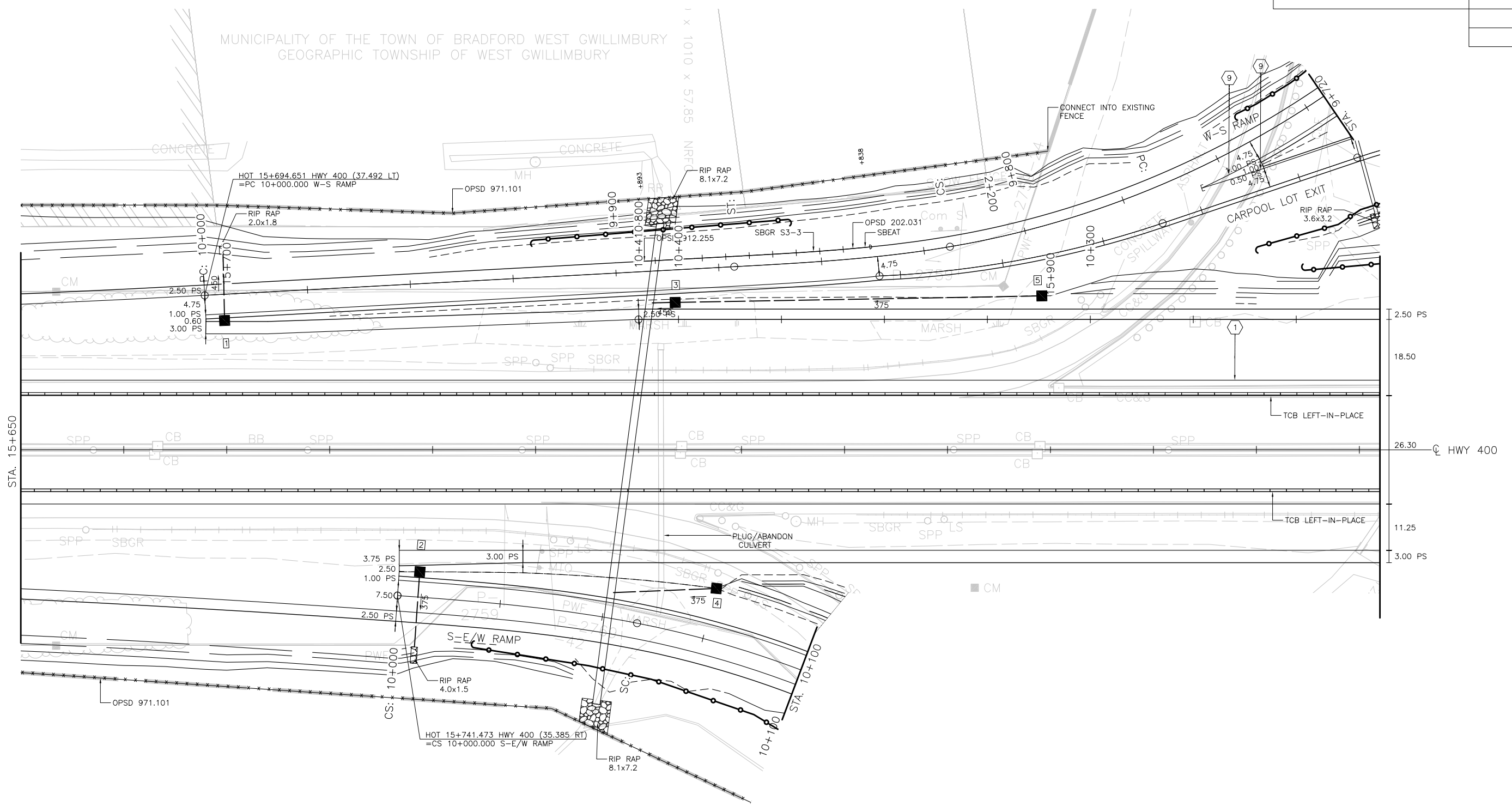
PLATE No
CONT XXXX-XXXX
WP 2331-16-00
NEW CONSTRUCTION
STA 15+650 TO STA 15+980
Survey JANUARY 2021 Revised ----



SHEET
415



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY



**NOT FOR
CONSTRUCTION**

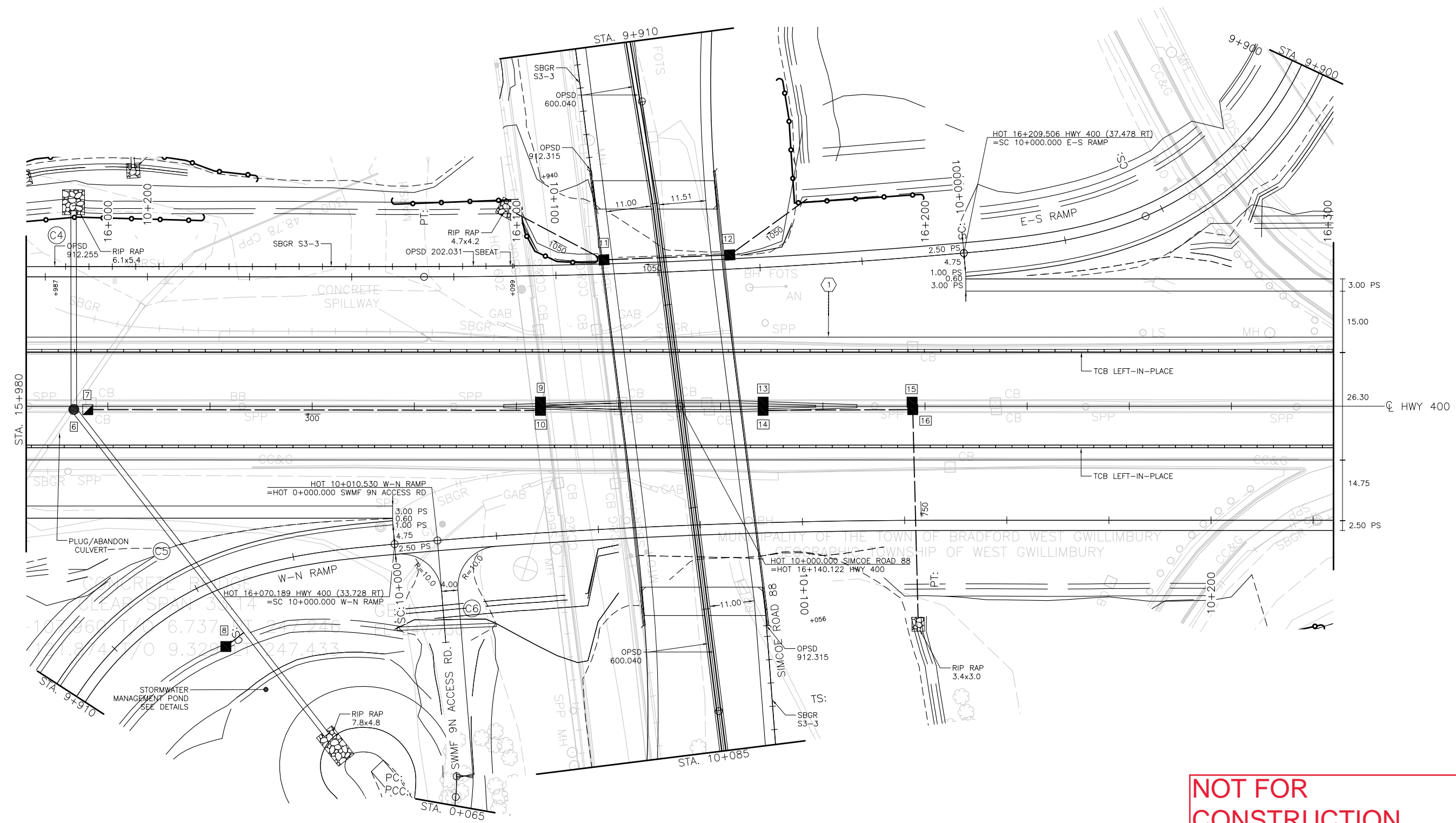
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AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00
NEW CONSTRUCTION
STA 15+980 TO STA 16+300
Survey JANUARY 2021 Revised ----



SHEET
416



**NOT FOR
CONSTRUCTION**

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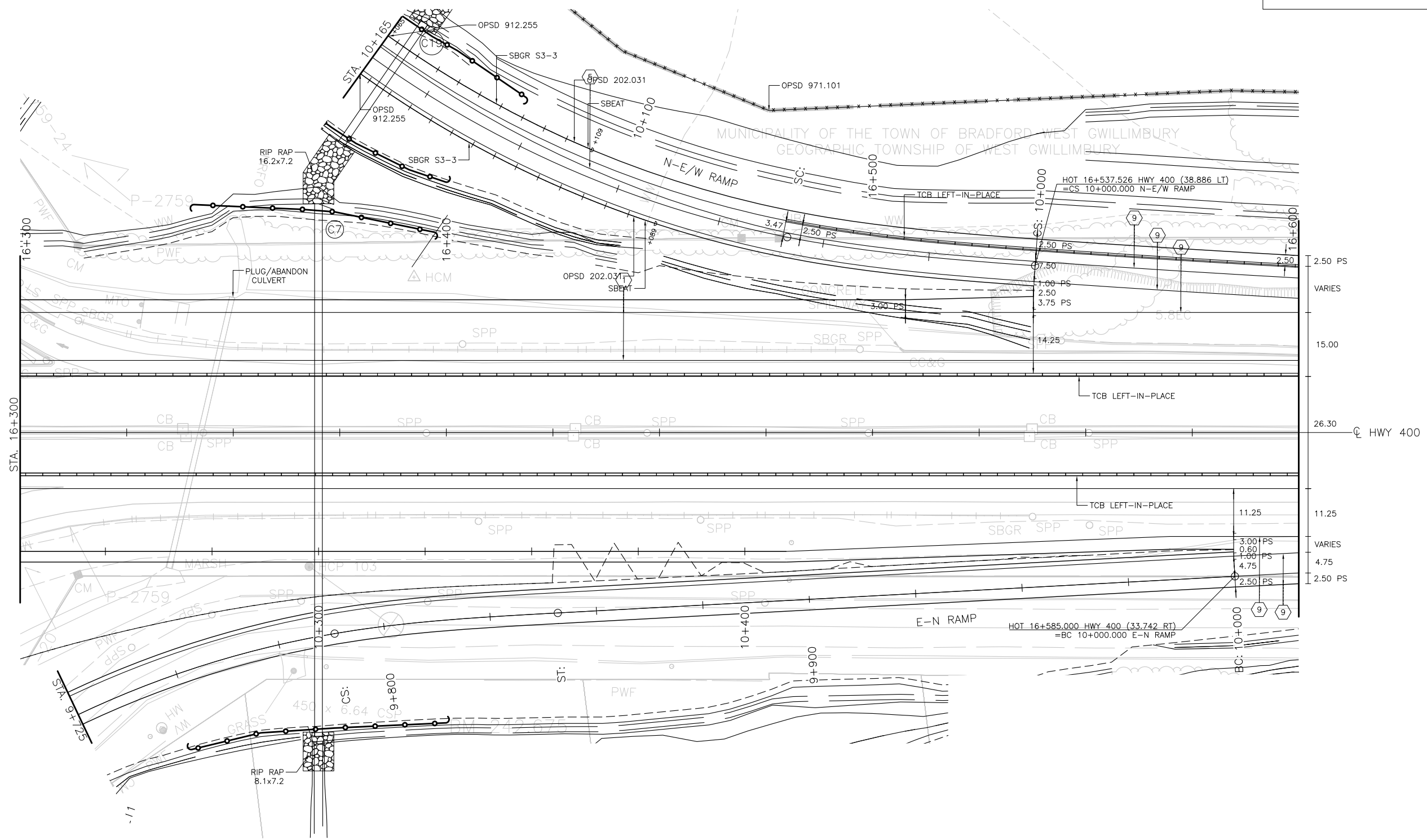
MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05
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PLATE No
CONT XXXX-XXXX
WP 2331-16-00
NEW CONSTRUCTION
STA 16+300 TO STA 16+600
Survey JANUARY 2021 Revised ----



SHEET
417



**NOT FOR
CONSTRUCTION**

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MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05
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PLATE No
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WP 2331-16-00

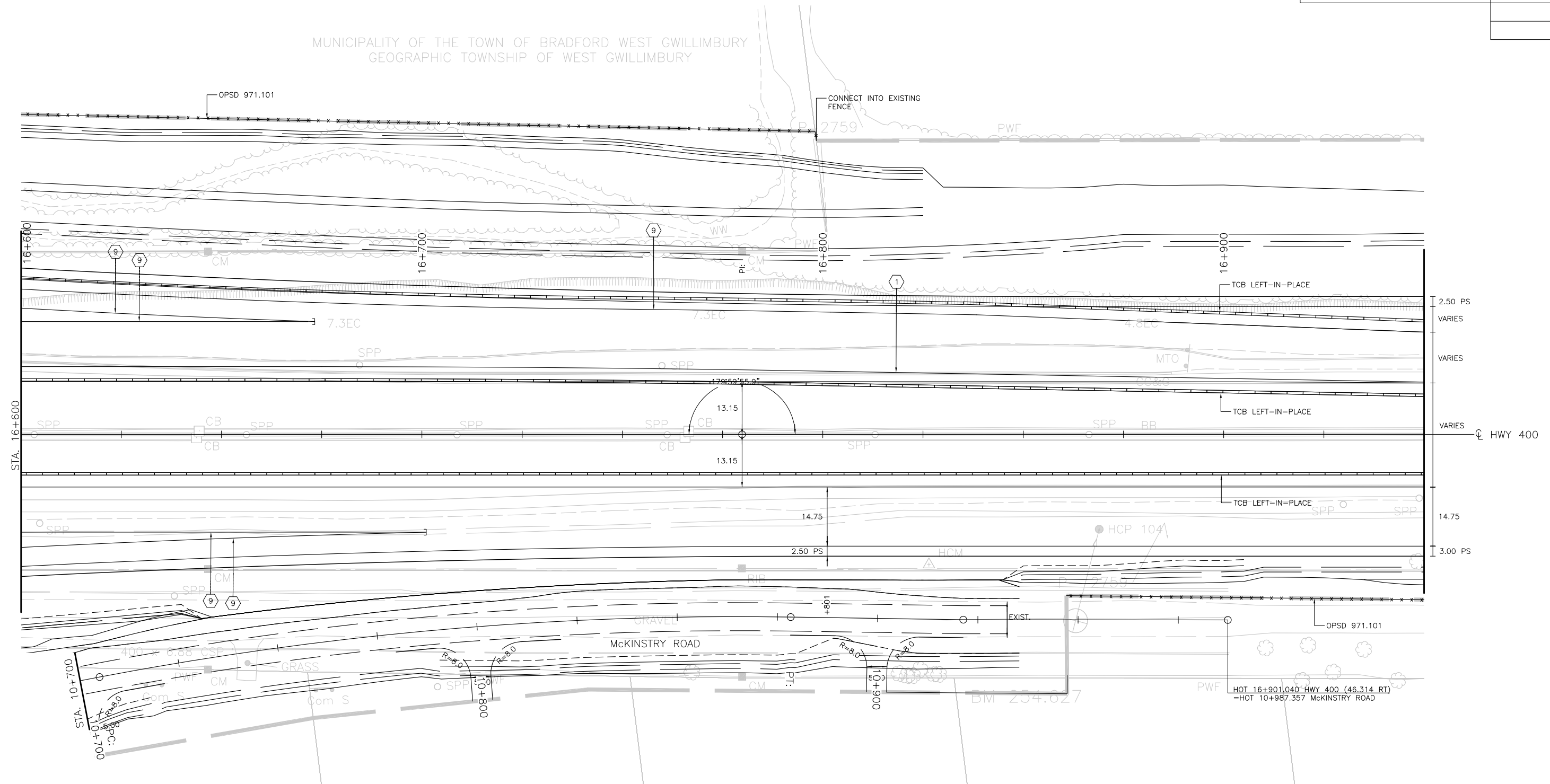


NEW CONSTRUCTION
STA 16+600 TO STA 16+950
Survey JANUARY 2021 Revised ----

SHEET
418



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY



**NOT FOR
CONSTRUCTION**

SCALE
2.5 5
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MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

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PLATE No
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WP 2331-16-00



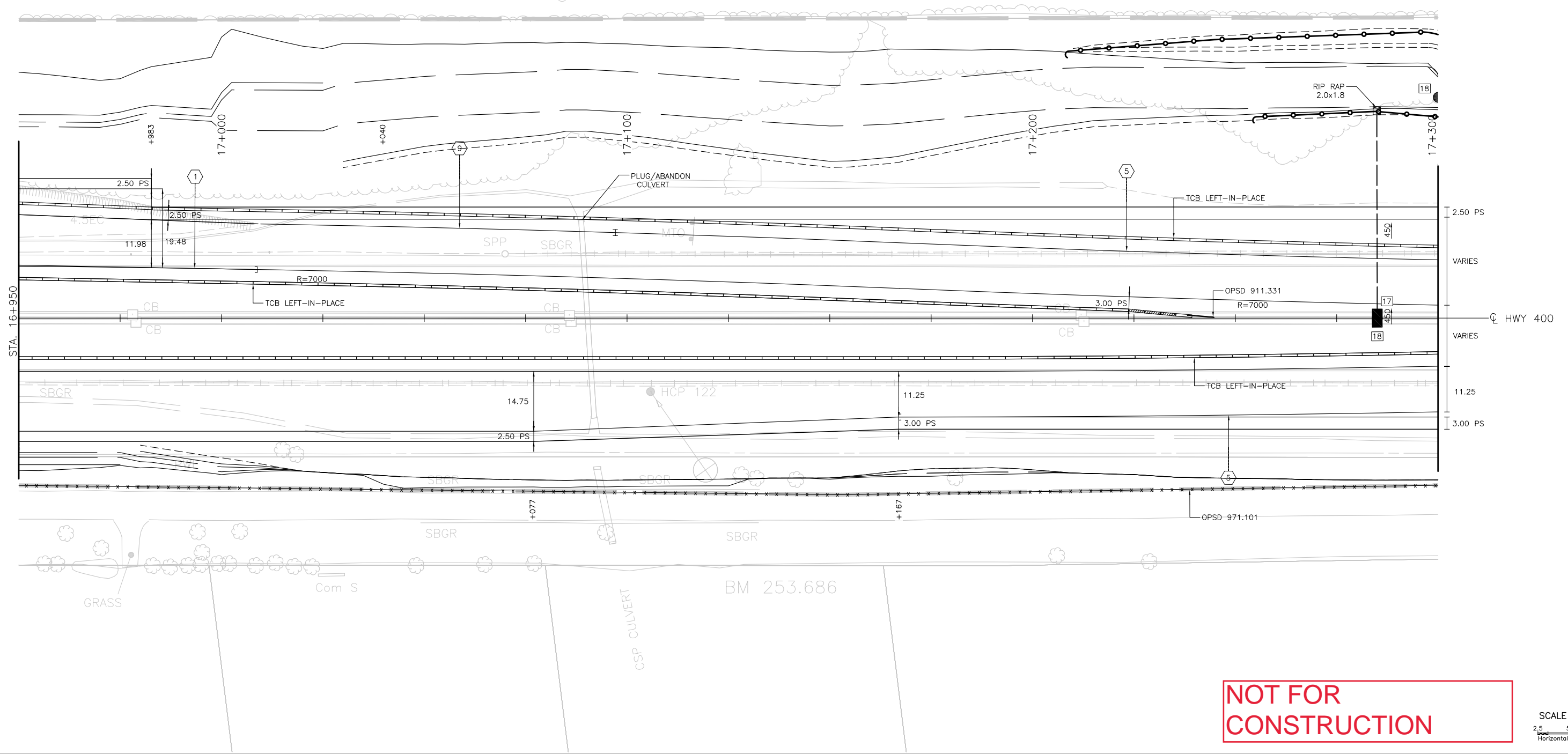
NEW CONSTRUCTION
STA 16+950 TO STA 17+300
Survey JANUARY 2021 Revised ----

SHEET
419



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY

30 x 48.94 NRFO



NOT FOR CONSTRUCTION

SCALE
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Horizontal

MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05
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WP 2331-16-00

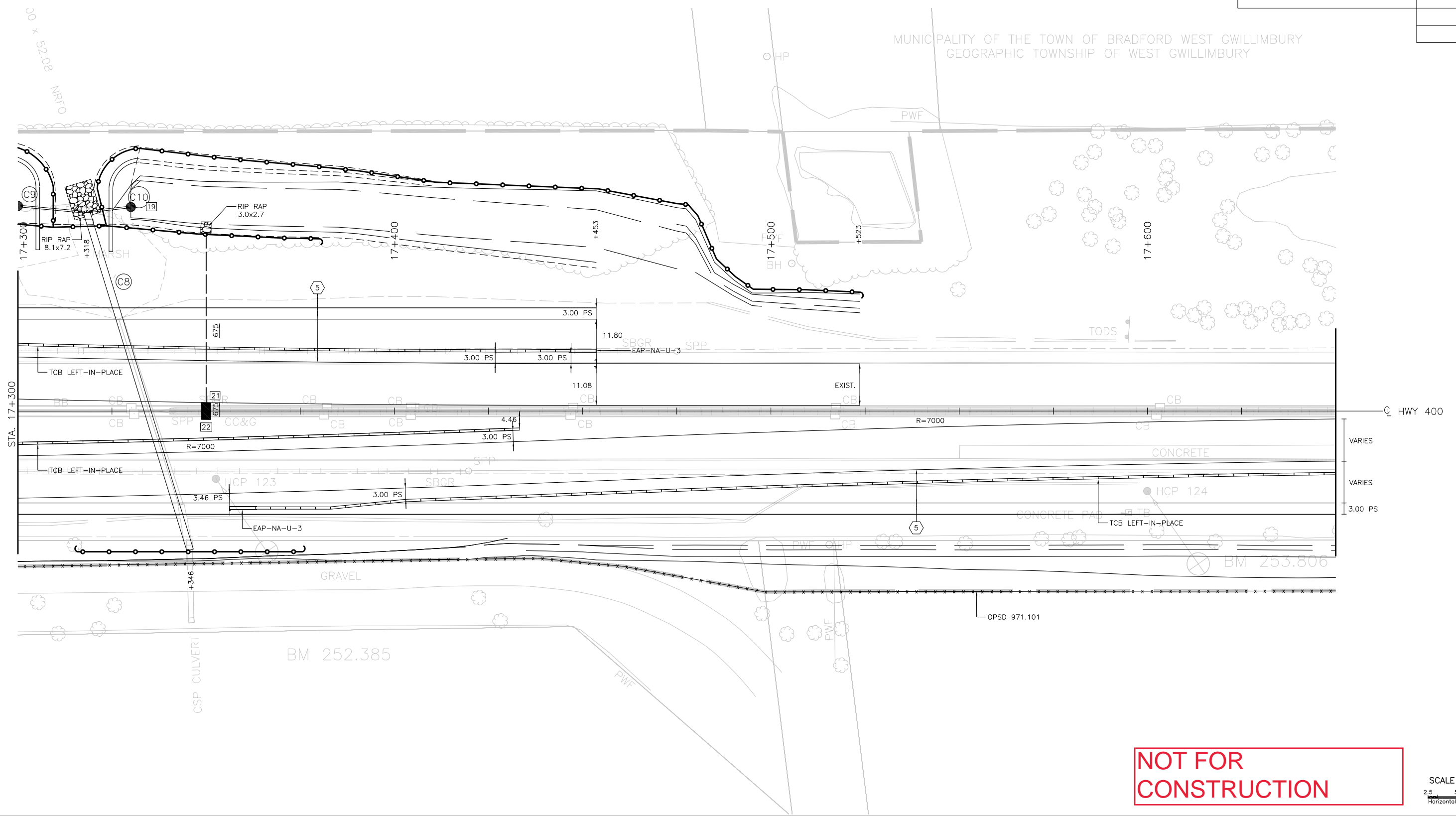


NEW CONSTRUCTION
STA 17+300 TO STA 17+650
Survey JANUARY 2021 Revised ----

SHEET
420



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY



**NOT FOR
CONSTRUCTION**

SCALE
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MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

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PLATE No
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WP 2331-16-00

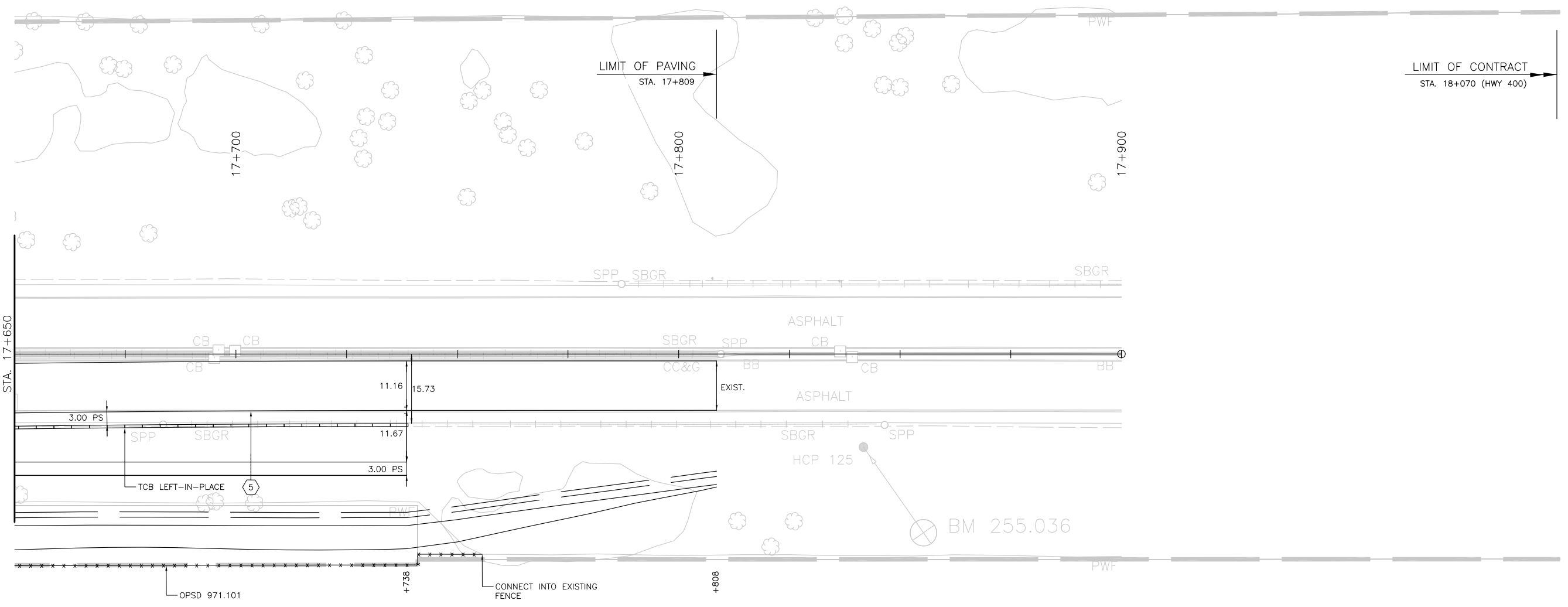


NEW CONSTRUCTION
STA 17+650 TO STA 17+950
Survey JANUARY 2021 Revised ----

SHEET
421



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY



**NOT FOR
CONSTRUCTION**

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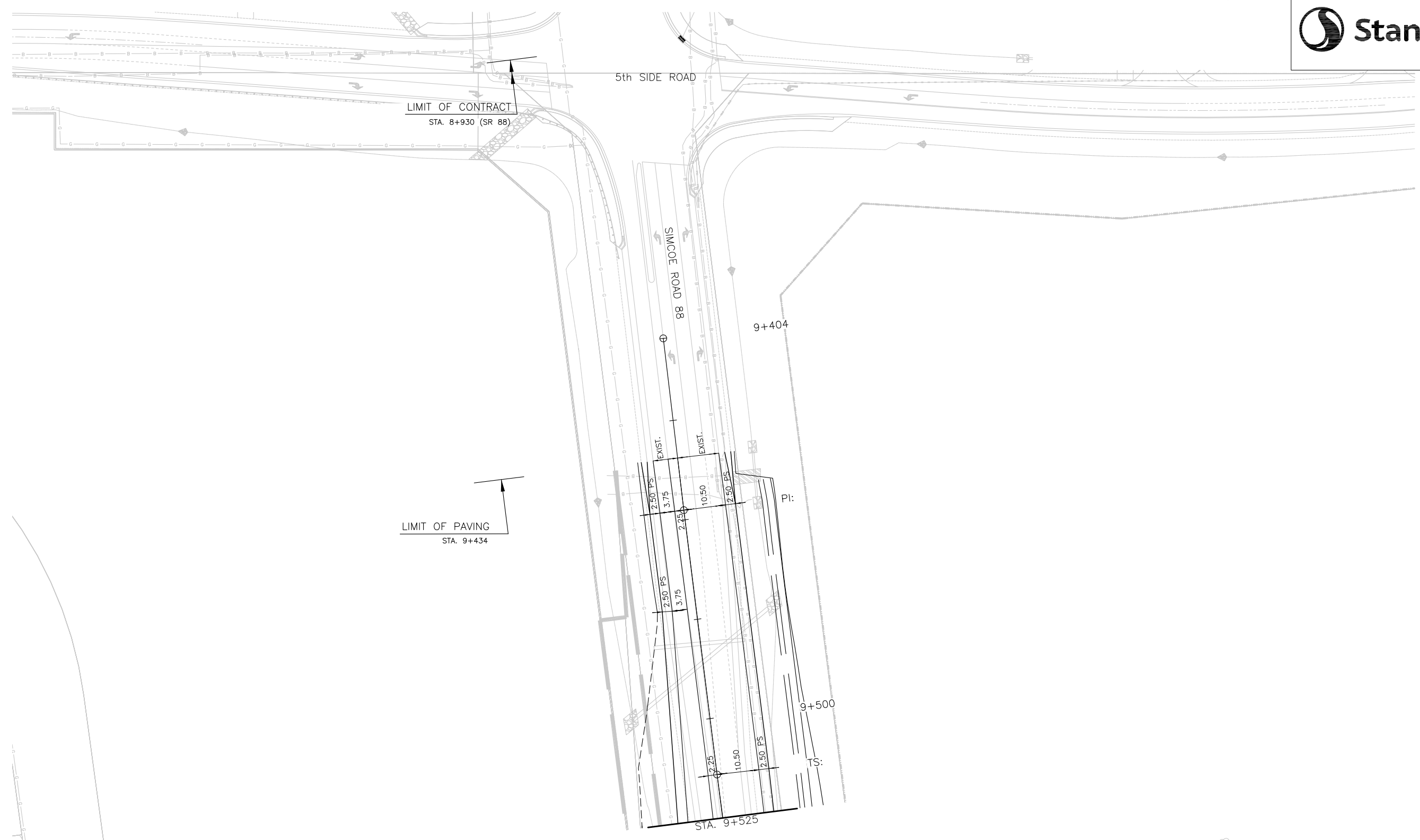
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AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00



NEW CONSTRUCTION
STA 9+350 TO STA 9+525
Survey JANUARY 2021 Revised ----

SHEET
422



**NOT FOR
CONSTRUCTION**

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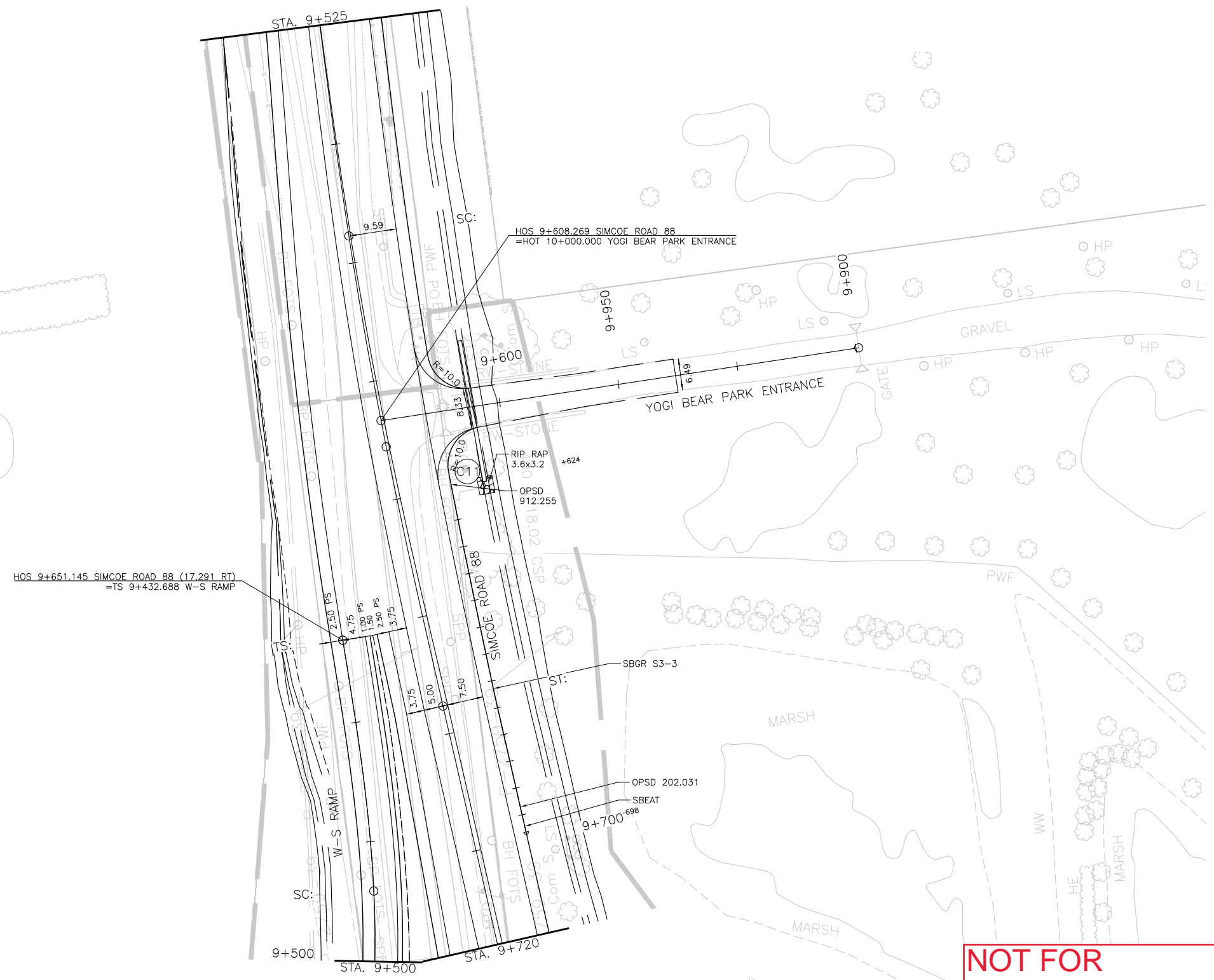
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AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00



NEW CONSTRUCTION
STA 9+525 TO STA 9+720
Survey JANUARY 2021 Revised ----

SHEET
423



**NOT FOR
CONSTRUCTION**

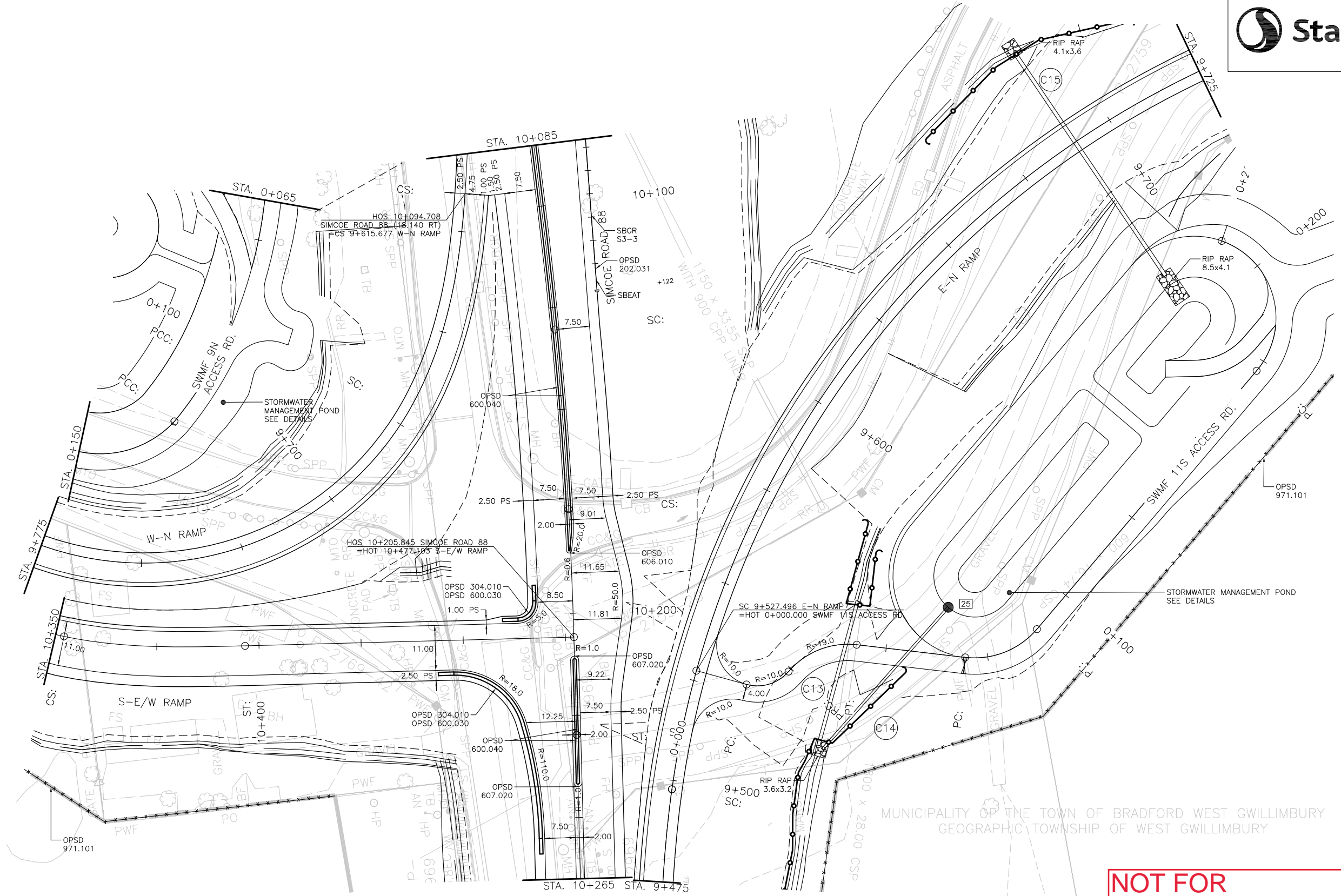
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AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00
NEW CONSTRUCTION
STA 10+085 TO STA 10+265
Survey JANUARY 2021 Revised ----



SHEET
425



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY

**NOT FOR
CONSTRUCTION**

SCALE
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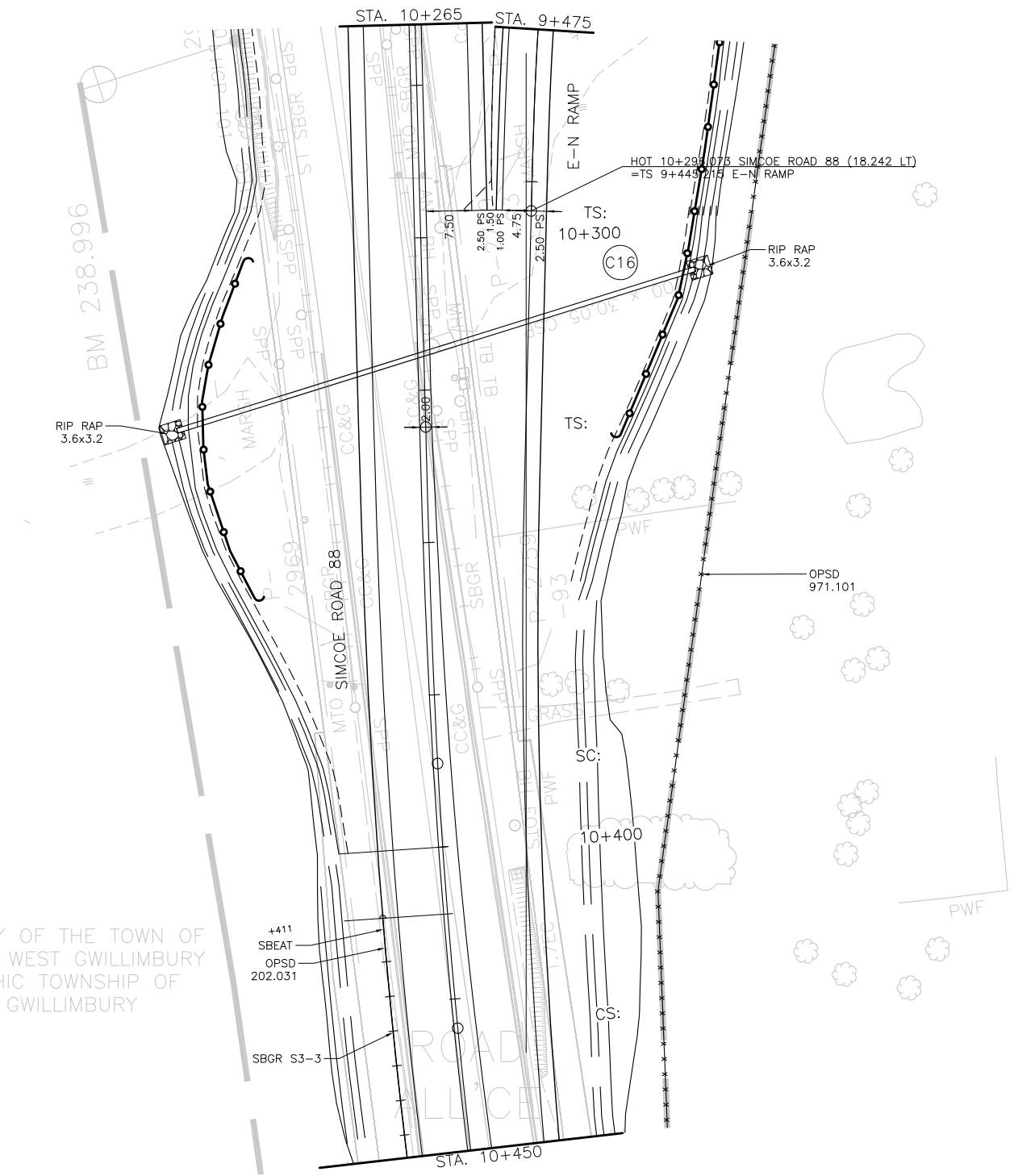
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AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00



NEW CONSTRUCTION
STA 10+265 TO STA 10+450
Survey JANUARY 2021 Revised ----

SHEET
426



MUNICIPALITY OF THE TOWN OF
BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF
WEST GWILLIMBURY


4411
SBEAT
OPSD
202.031
SBGR S3-3

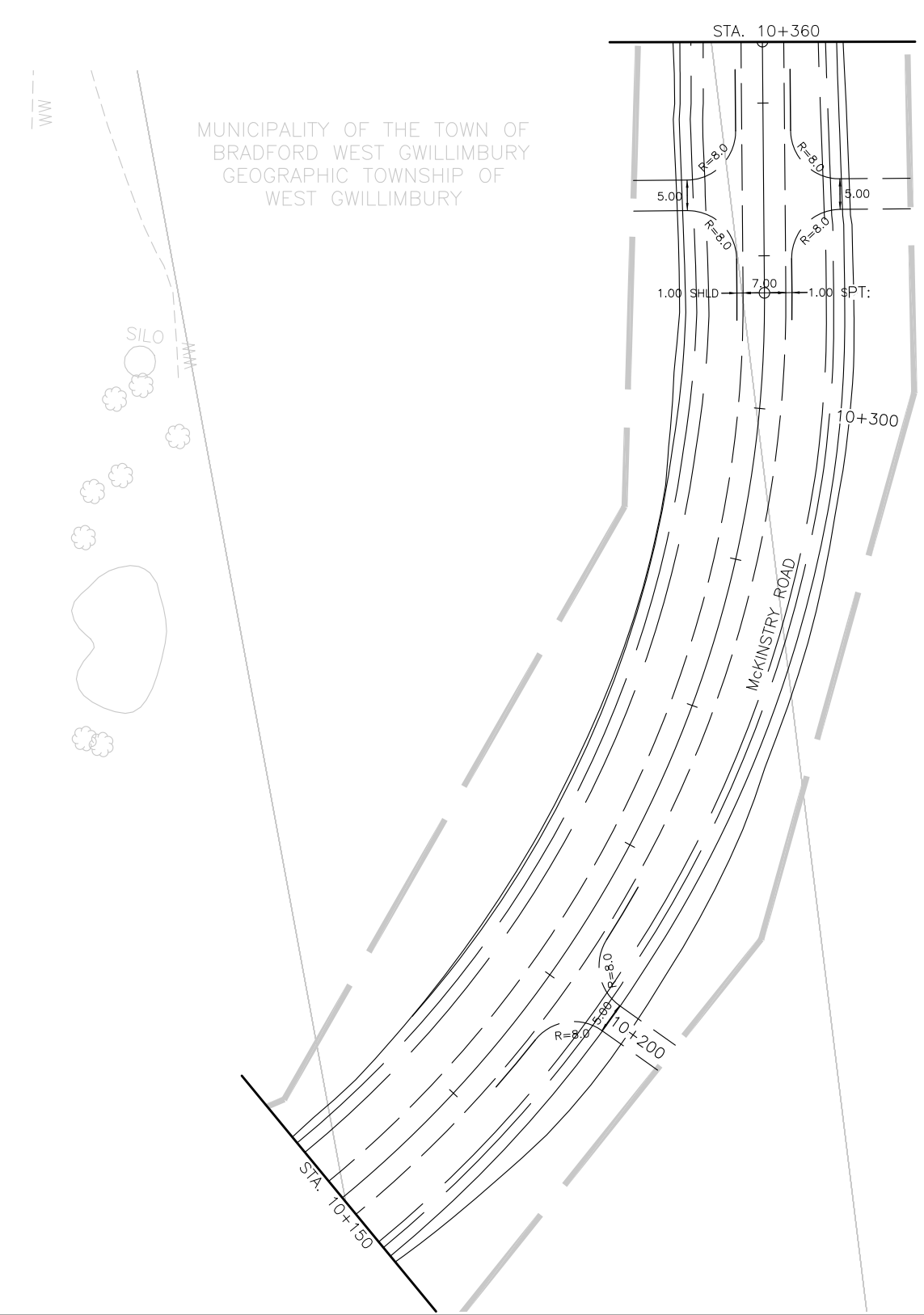
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UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00
NEW CONSTRUCTION
STA 10+150 TO STA 10+360
Survey JANUARY 2021 Revised ----


SHEET 428




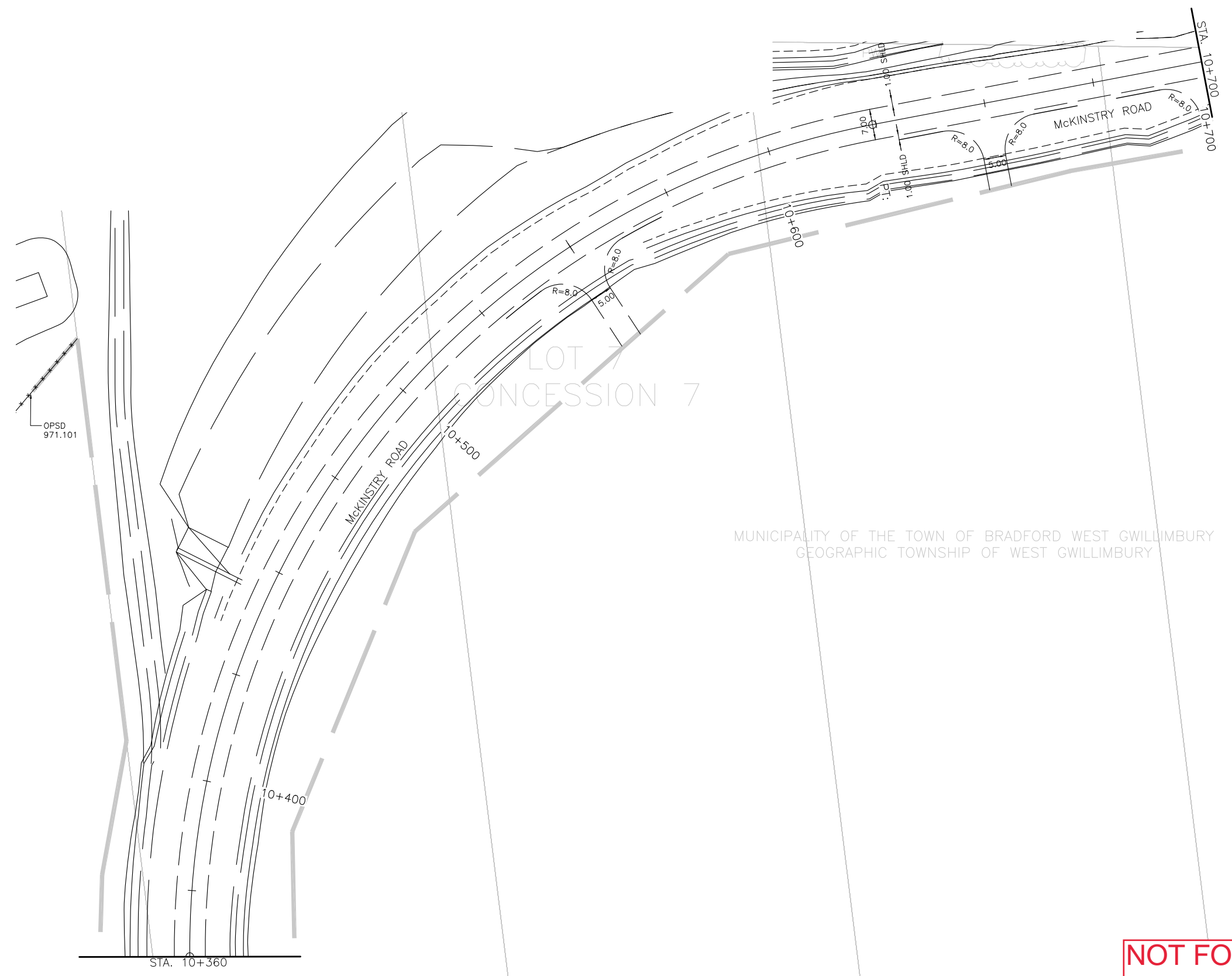
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SCALE
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METRIC
DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00
NEW CONSTRUCTION
STA 10+360 TO STA 10+700
Survey JANUARY 2021 Revised ----


SHEET
429



MUNICIPALITY OF THE TOWN OF BRADFORD WEST GWILLIMBURY
GEOGRAPHIC TOWNSHIP OF WEST GWILLIMBURY

**NOT FOR
CONSTRUCTION**

SCALE
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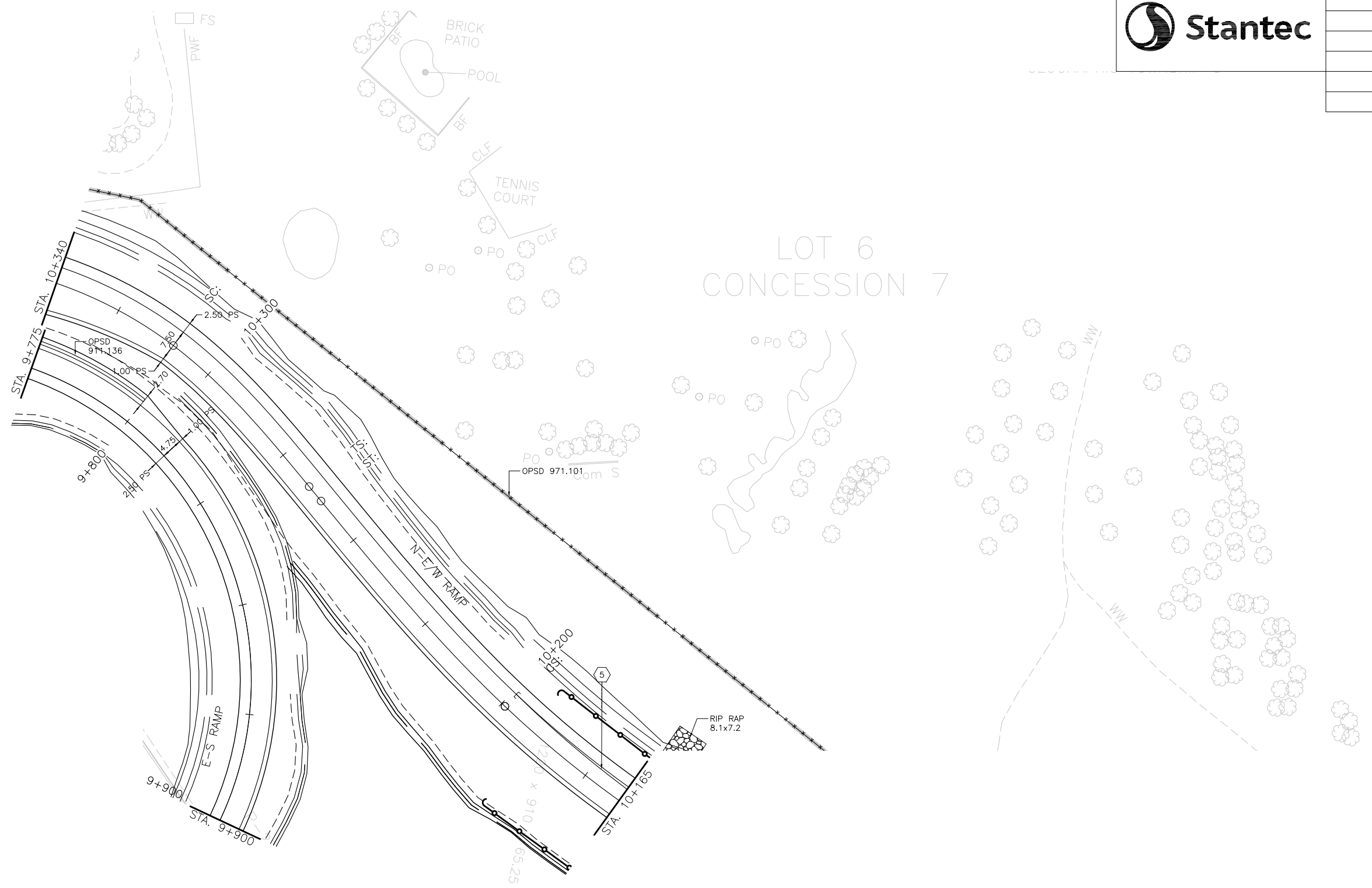
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AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

PLATE No
CONT XXXX-XXXX
WP 2331-16-00



NEW CONSTRUCTION
STA 10+340 TO STA 10+165
Survey JANUARY 2021 Revised ----

SHEET
430




**NOT FOR
CONSTRUCTION**

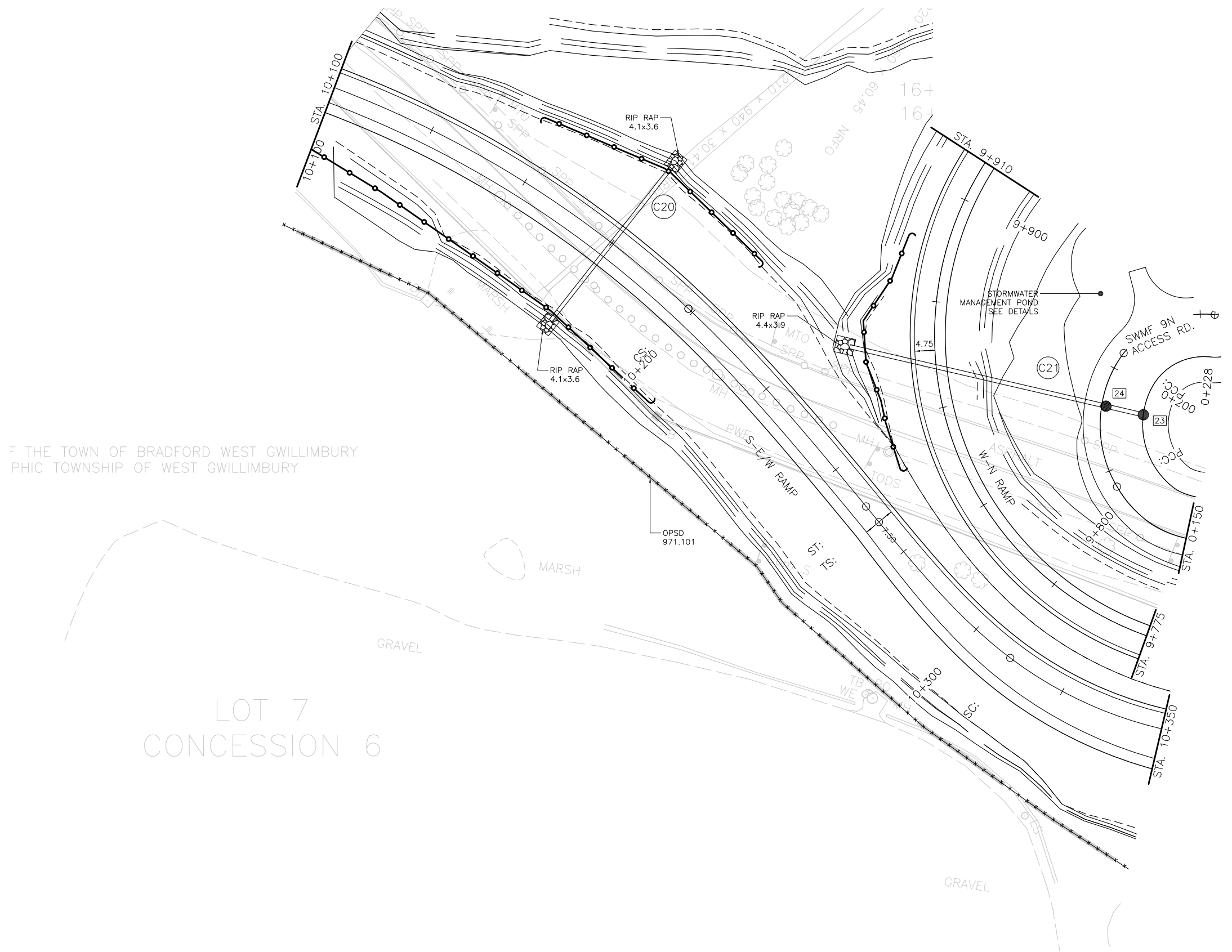
SCALE
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MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05
DRAWING NAME: 1095_k400_nc.dwg
CREATED: November 12, 2023
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PLATE No
CONT XXXX-XXXX
WP 2331-16-00
NEW CONSTRUCTION
STA 10+100 TO STA 10+350
Survey JANUARY 2021 Revised ----


SHEET
431

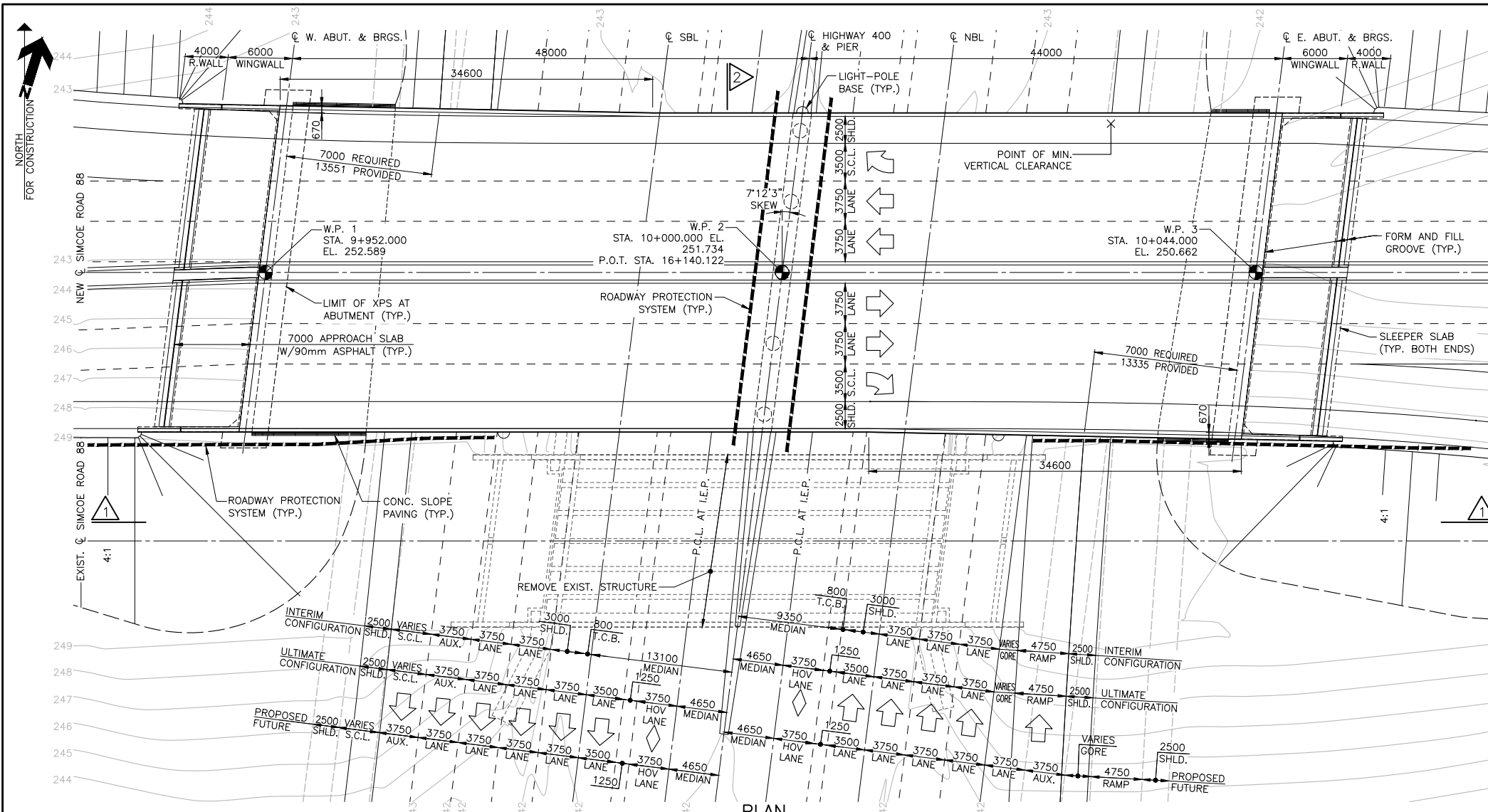


THE TOWN OF BRADFORD WEST GWILLIMBURY
PHIC TOWNSHIP OF WEST GWILLIMBURY

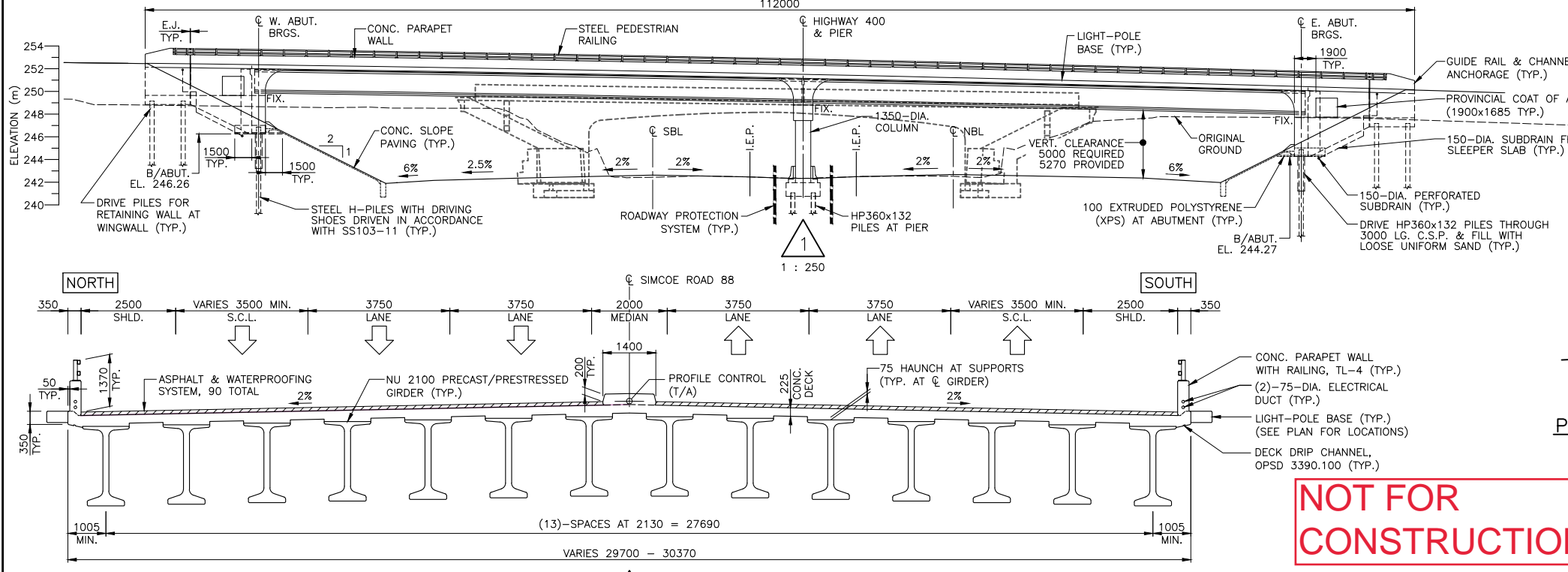
LOT 7
CONCESSION 6

**NOT FOR
CONSTRUCTION**

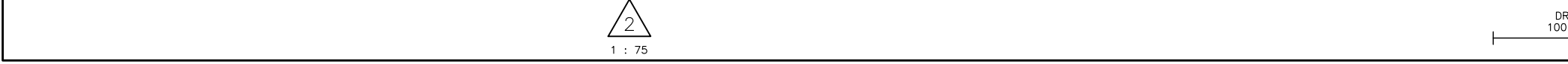
SCALE
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Horizontal



PLAN
1 : 250



PROFILE OF HIGHWAY 400 I.E.P.
1 : 250



PROFILE OF SIMCOE ROAD 88
1 : 75

METRIC
DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

HWY 400
CONT
WP 2331-16-01
SIMCOE ROAD 88 UNDERPASS
REPLACEMENT
GENERAL ARRANGEMENT
SHEET
571



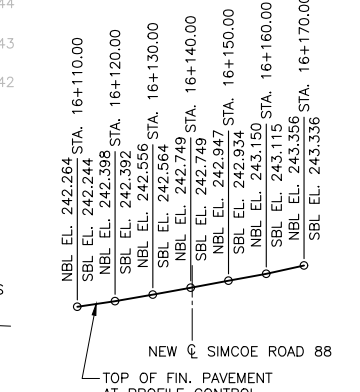
LIST OF DRAWINGS

- GENERAL ARRANGEMENT
- BOREHOLE LOCATION AND SOIL STRATA
- CONSTRUCTION STAGING
- FOUNDATIONS I
- FOUNDATIONS II
- ABUTMENT LAYOUT
- ABUTMENT REINFORCING
- WINGWALLS
- RETAINING WALLS
- PIER I
- PIER II
- PRECAST NU GIRDERS I
- PRECAST NU GIRDERS II
- MINIMUM REQUIREMENTS FOR NU GIRDERS INSTALLATION
- DECK DETAILS AND SCREED ELEVATIONS
- DECK REINFORCING I
- DECK REINFORCING II
- DECK REINFORCING III
- PARAPET WALL
- PARAPET RAILING
- APPROACH SLAB
- EXPANSION JOINT AND SLEEPER SLAB
- EXPANSION JOINT DETAILS
- EXPANSION JOINT ASSEMBLY
- EXPANSION JOINT SEQUENCE OF INSTALLATION
- CONCRETE SLOPE PAVING
- AS-CONSTRUCTED ELEVATIONS AND DIMENSIONS
- PILE DRIVING CONTROL
- MISCELLANEOUS DETAILS
- ELECTRICAL EMBEDDED WORK

LEGEND

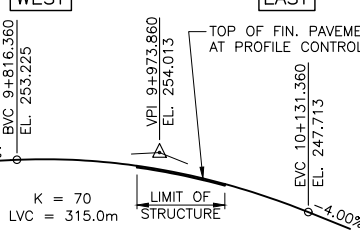
- W.P. - DENOTES WORKING POINT
- T/A - DENOTES TOP OF ASPHALT
- I.E.P. - DENOTES INSIDE EDGE OF PAVEMENT
- P.O.T. - DENOTES POINT ON TANGENT (HWY 400)
- S.C.L. - DENOTES SPEED CHANGE LANE
- T.C.B. - DENOTES TEMPORARY CONSTRUCTION BARRIER

SOUTH NORTH



PROFILE OF HIGHWAY 400 I.E.P.
N.T.S.

WEST EAST



PROFILE OF SIMCOE ROAD 88
N.T.S.

GENERAL NOTES

- SPECIFIED 28-DAY CONCRETE COMPRESSIVE STRENGTH:
PRECAST GIRDERS 60 MPa
REMAINDER 30 MPa UNLESS OTHERWISE NOTED.
- CLEAR COVER TO REINFORCING STEEL:
FOOTINGS 100±25
DECK TOP 70±20
BOTTOM 40±10
PIER COLUMNS, SHAFTS & CAPS 70±10
REMAINDER 70±20
UNLESS OTHERWISE NOTED.
- REINFORCING STEEL:
REINFORCING STEEL SHALL BE GRADE 500W UNLESS OTHERWISE SPECIFIED.
STAINLESS REINFORCING STEEL SHALL BE TYPE 316LN, OR DUPLEX 2205 AND HAVE A MINIMUM YIELD STRENGTH OF 500 MPa.
BAR MARKS WITH PREFIX 'S' DENOTE STAINLESS STEEL BARS.
TENSION LAP LENGTHS NOT INDICATED ON THE CONTRACT DRAWINGS SHALL BE CLASS B.
BAR HOOKS SHALL HAVE STANDARD HOOK DIMENSIONS USING MINIMUM BEND DIAMETERS, WHILE STIRRUPS AND TIES SHALL HAVE MINIMUM HOOK DIMENSIONS. ALL HOOKS SHALL BE IN ACCORDANCE WITH THE STRUCTURAL STANDARD DRAWING SS112-1, UNLESS INDICATED OTHERWISE.
- CONSTRUCTION
THE CONTRACTOR SHALL ESTABLISH THE BEARING SEAT ELEVATIONS BY DEDUCTING THE ACTUAL BEARING THICKNESSES FROM THE TOP OF BEARING ELEVATIONS. IF THE ACTUAL BEARING THICKNESSES ARE DIFFERENT FROM THOSE GIVEN WITH THE BEARING DESIGN DATA, THE CONTRACTOR SHALL ADJUST THE REINFORCING STEEL TO SUIT.
BACKFILL SHALL NOT BE PLACED BEHIND THE ABUTMENTS UNTIL THE DECK SLAB IS IN PLACE AND HAS REACHED 70% OF ITS DESIGN STRENGTH.
BACKFILL SHALL BE PLACED SIMULTANEOUSLY BEHIND BOTH ABUTMENTS KEEPING THE HEIGHT OF THE BACKFILL APPROXIMATELY THE SAME. AT NO TIME SHALL THE DIFFERENCE IN ELEVATION BE GREATER THAN 500mm.
CONSTRUCT ABUTMENTS TO THE BEARING SEAT ELEVATIONS. THE CONTRACTOR SHALL SUPPLY TEMPORARY LATERAL BRACINGS FOR ABUTMENTS, FORMWORK AND LATERAL BRACINGS SHALL NOT BE REMOVED UNTIL THE CONCRETE IN THE DECK HAS REACHED 70% OF ITS 28-DAY STRENGTH.
ROADWAY-PROTECTION SYSTEMS SHALL BE DESIGNED FOR PERFORMANCE LEVEL 2.
- VERTICAL CLEARANCE AND PROPOSED FUTURE
REQUIRED VERTICAL CLEARANCE IS ALSO PROVIDED FOR THE PROPOSED-FUTURE CONFIGURATION OF HWY-400, CONSIDERING ONE 3.75m LANE ADDED IN EACH DIRECTION ON SIMCOE ROAD 88.
THE POSITION OF ABUTMENTS ACCOMMODATE THE ULTIMATE CONFIGURATION OF HWY-400 AND ALSO ALLOW FOR THE PROPOSED-FUTURE WIDENING OF HWY-400 WHERE INSTALLATION OF A RETAINING WALL, CUT INTO FORESLOPE, ALONGSIDE EACH EDGE OF SHOULDER WOULD BE REQUIRED.

APPLICABLE STANDARD DRAWINGS

- OPSD 3101.150 WALLS ABUTMENT, BACKFILL MINIMUM GRANULAR REQUIREMENT
- OPSD 3360.100 DECK, LIGHT POLE BASES, STRUCTURES WITH BARRIER WALLS (MODIFIED)
- OPSD 3370.100 DECK, WATERPROOFING HOT APPLIED ASPHALT MEMBRANE WITH PROTECTION BOARD
- OPSD 3370.101 DECK, WATERPROOFING HOT APPLIED ASPHALT MEMBRANE AT ACTIVE CRACKS GREATER THAN 2mm WIDE AND CONSTRUCTION JOINTS
- OPSD 3390.100 DECK, DRIP CHANNEL
- OPSD 3419.100 BARRIERS AND RAILINGS STEEL GUIDE RAIL AND CHANNEL ANCHORAGE
- MTOD 3941.210 FIGURES IN CONCRETE, SITE NUMBER AND DATE LAYOUT
- OPSD 3950.100 JOINTS, CONCRETE EXPANSION & CONSTRUCTION ON STRUCTURE

NOT FOR CONSTRUCTION

DRAWING NOT TO BE SCALED
100 mm ON ORIGINAL DRAWING

REVISIONS	DATE	BY	DESCRIPTION

DESIGN	M.C.	CHK	M.D.	CODE	CSA S6:19	LOAD	CL-625-0NT	DATE	NOV 2023
DRAWN	C.S.	CHK	M.C.	SITE	30X-0309/B0	STRUCT	SCHEME	DWG.	1

16500:095-30-309-01.DWG Nov 17 2023