

SEE DRAWING 13254-EXT-1

TOPOGRAPHIC NOTE

INFORMATION SHOWN ON THIS DRAWING IS BASED ON TOPOGRAPHICAL DATA PROVIDED BY OTHERS. QUARTEK GROUP INC. DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN, NOR FOR THE WAY IN WHICH THIS INFORMATION IS USED BY OTHERS. REPORT ANY CONFLICTING INFORMATION TO QUARTEK GROUP INC. IMMEDIATELY.

ELEVATIONS ARE BASED ON THE TOWN OF NIAGARA-ON-THE-LAKE DATUM AND WERE DERIVED FROM CUT SQUARE ON TOP OF CONCRETE CULVERT UNDER OLD YORK ROAD, WEST OF TOWNLINE ROAD HAVING AN ELEVATION OF 113.276 METRES.

- EXTENDED PAVING AREA
- ADDITIONAL ELEMENTS
- ELEMENTS REMOVED/NOT CONSTRUCTED

NOTE: THE INFORMATION ON THIS CONSTRUCTION RECORD DRAWING IS DERIVED FROM GENERAL REVIEW DURING CONSTRUCTION AND FROM INFORMATION PROVIDED BY THE CONTRACTOR OR OTHERS. QUARTEK GROUP INC. DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN ON THIS DRAWING NOR FOR THE WAY IN WHICH THIS INFORMATION IS USED BY OTHERS. REPORT ANY CONFLICTING INFORMATION TO QUARTEK GROUP INC. IMMEDIATELY.

NOTES

- EXISTING DRAINAGE OF ABUTTING LANDS IS NOT TO BE DISTURBED
- ALL SITE TRAFFIC TO ENTER/EGRESS THROUGH A STABILIZED CONSTRUCTION ACCESS AS DETAILED ON DRAWING.
- RETAINING WALLS, 1.0m HIGH OR GREATER, ARE TO BE DESIGNED BY AND CONSTRUCTED TO THE SPECIFICATIONS OF A REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
- ALL CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ACCESS POINT.
- ALL TOPSOIL STOCKPILES SHALL BE SURROUNDED WITH SEDIMENTATION CONTROL FENCING
- PROVIDE A 1-METRE WIDE UNSTRIPPED BUFFER AROUND THE PERIMETER OF THE PROPERTY.
- PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION.
- ALL EROSION CONTROL MEASURES ARE TO BE IN PLACE BEFORE STARTING CONSTRUCTION AND REMAIN IN PLACE UNTIL RESTORATION IS COMPLETE.
- ALL COLLECTED SEDIMENT MUST BE DISPOSED OF AT AN APPROVED LOCATION.
- PROTECT ALL CATCHBASINS, MAINTENANCE HOLES AND PIPE ENDS FROM SEDIMENT INTRUSION WITH GEOTEXTILE (TERRAFIX 270R OR APPROVED EQUIVALENT)
- CHECK SUMPS PERIODICALLY AND CLEAN WHEN HALF FULL.
- PREVENT WIND-BLOWN DUST.
- STRAW BALES TO BE TERMINATED BY ROUNDING BALES TO CONTAIN AND FILTER RUNOFF.
- ALL SILT FENCING AT THE MINIMUM TO BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
- ALL THE ABOVE NOTES AND ANY SEDIMENT AND EROSION CONTROL MEASURES ARE AT THE MINIMUM TO BE IN ACCORDANCE WITH THE NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
- ANY MONITORING WELLS IDENTIFIED MUST BE DECOMMISSIONED BY AN APPROPRIATELY LICENSED CONTRACTOR PER ONTARIO WATER RESOURCES ACT [R.R.O. 1990, REG 903]
- REFER TO SITE PLAN FOR DIMENSIONS.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH 13254-LP SERIES, 13254-SS-1, AND 13254-EXT-1 AND SITE PLAN ASP-100 AND MSP-100.
- SEE DRAWING 13254-EXT-1 FOR ADDITIONAL NOTES AND LEGEND.

H	CONSTRUCTION RECORD	25 JULY 2018	KH
G	REV'D RETAINING WALL	30 JUN 2017	JRP
F	REV'D SITE MUNI ADDRESS	13 APR 2017	JRP
E	REV'D BUILDING LETTERS	30 MAR 2017	JRP
D	BUILDING PERMIT	24 FEB 2017	JRP
C	CONSTRUCTION	16 JAN 2017	JRP
B	TENDER	14 NOV 2016	JRP
A	REVIEW	07 NOV 2016	JRP
issue	issued for	date	int

seal

Do not scale drawings. Report any discrepancies to Quartek Group Inc. before proceeding.

Drawings must be sealed by the Architect and / or Engineer prior to the use for any building permit applications and / or government approval. Seals must be signed by the Architect and / or Engineer before drawings are used for any construction.

All construction to be in accordance with the current Ontario Building Code and all applicable Ontario regulations.

All drawings and related documents remain the property of Quartek Group Inc. all drawings are protected under copyright and under contract.

Quartek

Architects • Planners
Engineers • Project Managers
T 905 984 8676
89-91 St. Paul Street, Suite 100,
St. Catharines, ON L2R 3M3
www.quartekgroup.com

project title

INTERCONTINENTAL COMBO HOTEL

524 YORK ROAD, NIAGARA-ON-THE-LAKE

drawing title

PROPOSED GRADING

PHASE 1

drawn by

JTB/JRP/KH

designed by

JRP/DKP

scale

date

1:500

30 OCT 2016

job number

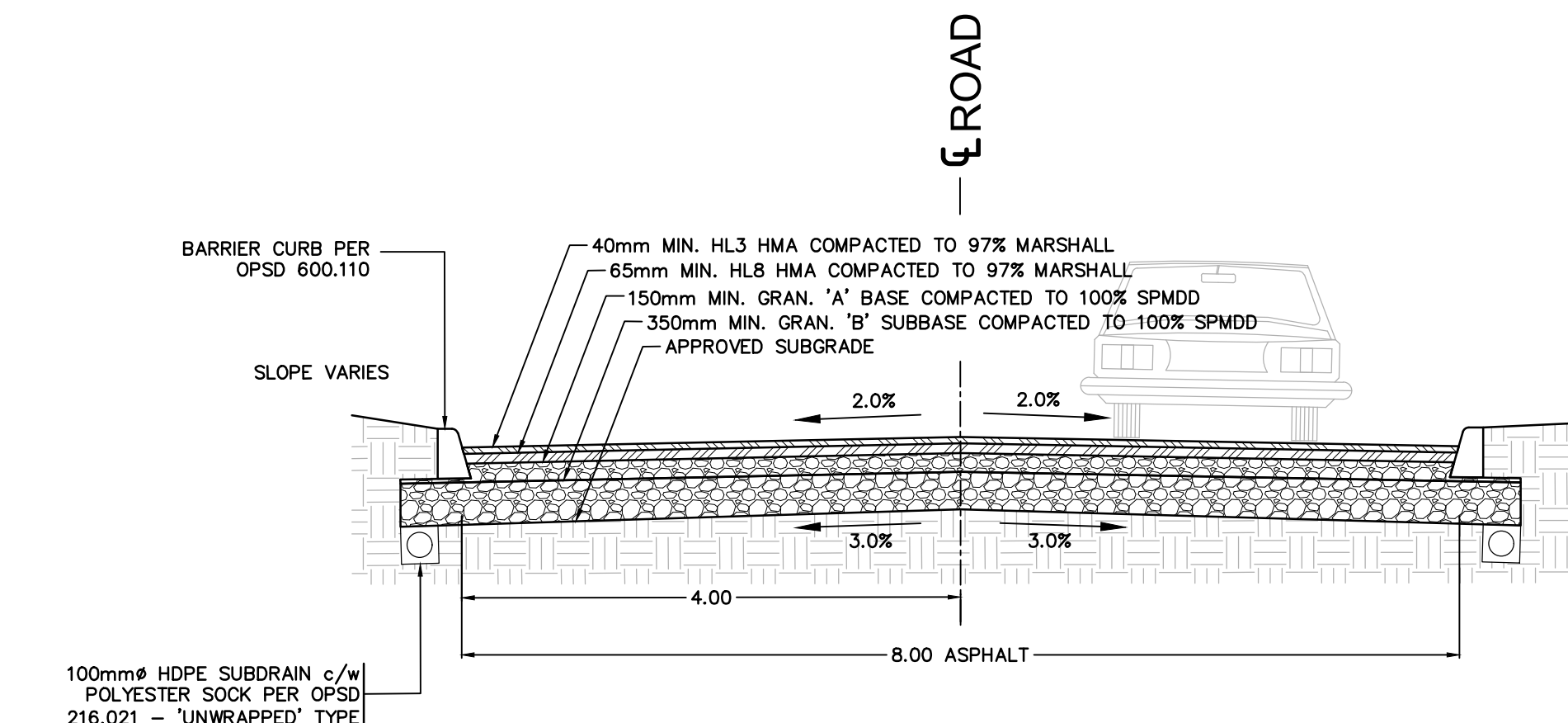
13254

issue

H

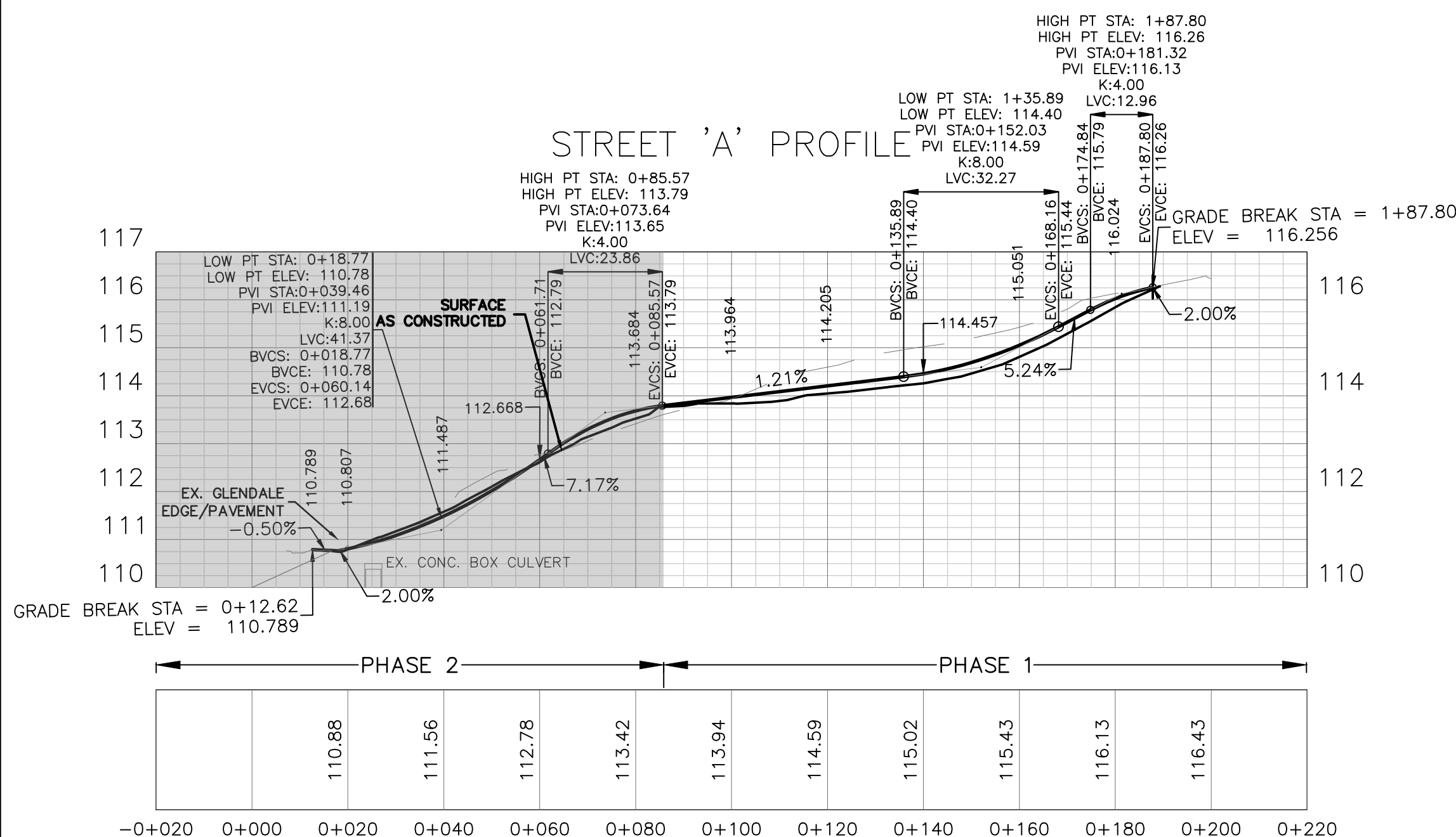
drawing number

13254-G-1



SCALE: NTS

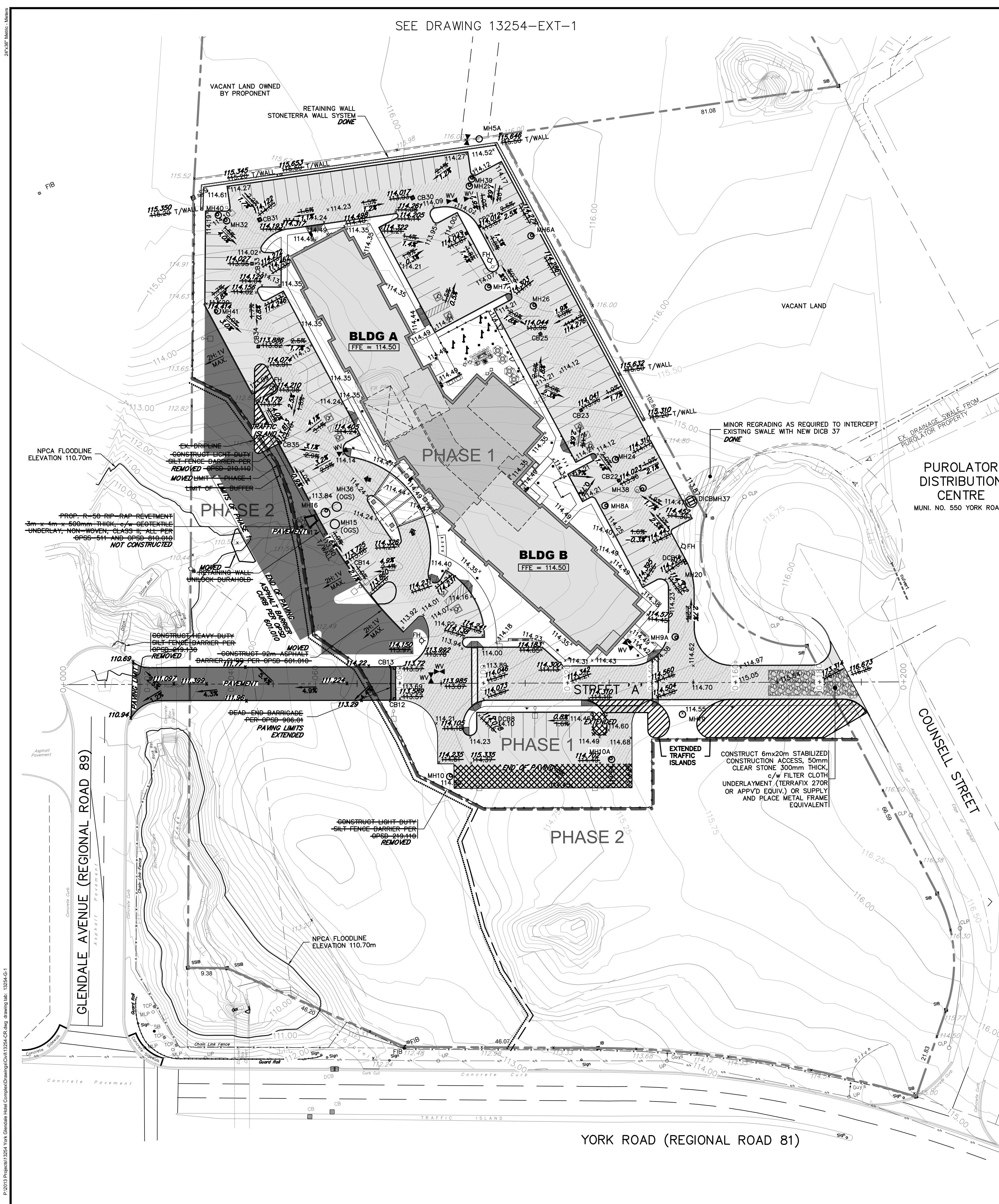
HEAVY-DUTY (HD) PAVEMENT STRUCTURE CROSS-SECTION




PROPOSED ROAD PROFILE

SCALE V. 1:100
H. 1:1000

YORK ROAD (REGIONAL ROAD 81)





SERVICING CROSSING TABLE			
LOCATION	SERVICE (INVERT/ OVERVERT)	ELEV.	CLEARANCE (m)
01	STM INV.	112.07	0.60
	WM OBV.	111.49 (max.)	
02	STM INV.	112.07	0.60
	WM OBV.	111.49 (max.)	
03	SAN INV.	112.93	0.60
	WM OBV.	112.33 (max.)	
04	SAN INV.	112.92	0.27
	STM OBV.	112.66	
05	SAN INV.	113.08	0.39
	STM OBV.	112.68	
06			N/A
07			N/A
08	SAN INV.	113.21	0.46
	STM OBV.	112.75	
09	STM INV.	112.46	0.60
	WM OBV.	111.86 (max.)	
10	STM INV.	112.63	0.60
	WM OBV.	112.03 (max.)	
11	SAN INV.	113.34	0.60
	WM OBV.	112.74 (max.)	
12	STM INV.	112.05	0.60
	WM OBV.	111.45 (max.)	
13	STM INV.	112.06	0.60
	WM OBV.	111.46 (max.)	
14	CB LEAD INV.	112.70	0.19
	STM OBV.	112.51	
15	STM INV.	111.99	0.60
	WM OBV.	111.39 (max.)	

[illegible]

I	CONSTRUCTION RECORD	25 JULY 2018	KH
H	REVD RETAINING WALL	30 JUN 2017	JRP
G	REVD SITE MUNI ADDRESS	13 APR 2017	JRP
F	REVD BUILDING LETTERS	30 MAR 2017	JRP
E	REVD WATER SERVICE	21 MAR 2017	JRP
D	BUILDING PERMIT	24 FEB 2017	JRP
C	CONSTRUCTION	16 JAN 2017	JRP
B	TENDER	14 NOV 2016	JRP
A	REVIEW	07 NOV 2016	JRP
issue	issued for	date	init.

Do not scale drawings. Report any discrepancies to Quartek Group Inc. before proceeding.

Drawings must be sealed by the Architect and / or Engineer prior to the use for any building permit applications and / or government approval. Seals must be signed by the Architect and / or Engineer before drawings are used for any construction.

All construction to be in accordance with the current Ontario Building Code and all applicable Ontario regulations.




All drawings and related documents remain the property of Quartek Group Inc., all drawings are protected under copyright and under contract.



◆ Architects ◆ Planners
◆ Engineers ◆ Project Managers
T 905 984 8676

89 - 91 St. Paul Street, Suite 100,
St. Catharines, ON, L2R 3M3
www.quarlekgroup.com

NOTE:
THE INFORMATION ON THIS CONSTRUCTION RECORD DRAWING IS DERIVED FROM GENERAL REVIEW DURING CONSTRUCTION AND FROM INFORMATION PROVIDED BY THE CONTRACTOR OR OTHERS. QUARTEK GROUP INC. DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE INFORMATION SHOWN ON THIS DRAWING NOR FOR THE WAY IN WHICH THIS INFORMATION IS USED BY OTHERS. REPORT ANY CONFLICTING INFORMATION TO QUARTEK GROUP INC. IMMEDIATELY.

 *EXTENDED PAVING AREA*
 *ADDITIONAL ELEMENTS*
 *ELEMENTS REMOVED/NOT CONSTRUCTED*

SANITARY SEWER STRUCTURE DETAILS

MH NO.	RIM EL.	PROP INVERT EL.	CONSTRUCTED EL.	SIZE (mm)	OPS DRAWING		COMMENTS
					STRUCTURE	FRAME/GRATE	
MH1A	116.50	N INV. 111.960 S INV. 111.960 W INV. 112.098	111.960 111.960 112.098	1200Ø	701.010	410.010 'A'	
MH2A	116.27	E INV. 112.126 W INV. 112.126	112.097 112.097	1200Ø	701.010	410.010 'A'	
MH3A	116.00	E INV. 112.351 W INV. 112.351	112.307 112.307	1200Ø	701.010	410.010 'A'	
MH4A	116.00	E INV. 112.579 SW INV. 112.579	112.547 112.547	1200Ø	701.010	410.010 'A'	
MH5A	116.01	NE INV. 112.805 S INV. 112.805		1200Ø	701.010	410.010 'A'	
MH6A	114.14	N INV. 112.913 W INV. 112.943	112.790 112.810	1200Ø	701.010	410.010 'A'	
MH7A	114.06	E INV. 113.021 S INV. 113.051 W INV. 113.071	112.850 112.870 112.900	1200Ø	701.010	410.010 'A'	
MH8A	114.20	N INV. 113.228 W INV. 113.278 S INV. 113.253	113.040 113.060 113.070	1200Ø	701.010	410.010 'A'	BLDG. 'A' SAN INV. =
MH9A	114.32	N INV. 113.389 S INV. 113.489 SW INV. 113.419	113.170 113.250 113.210	1200Ø	701.010	410.010 'A'	BLDG. 'B' SAN INV. =
MH10A	114.59	NE INV. 113.518 S INV. 113.548 W INV. 113.518	113.320 113.370 113.340	1200Ø	701.010	410.010 'A'	FUT. BLDG. 'C' SAN INV. =

project title:

INTERCONTINENTAL
COMBO HOTEL

524 YORK ROAD, NIAGARA-ON-THE-LAKE

drawing 8d

PROPOSED SITE SERVICES

PHASE 1

drawn by

ITB/IBD/KH

scale

1:500 30 JAN 2015

job number

13254

drawing number

13254-SS-1

NOTES

GENERAL

1. LOCATION AND SIZE OF EXISTING UTILITIES WAS DERIVED FROM VARIOUS DRAWINGS FROM OTHERS. THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN AND, WHERE SHOWN, THE ACCURACY OF THE LOCATION SHOWN OF SUCH UTILITIES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL CONTACT ALL SUCH UTILITIES INVOLVED AND INFORM HIMSELF AS TO THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME LIABILITY FOR DAMAGE TO THEM. CONTRACTOR TO REPORT ANY CONFLICTS OR DISCREPANCIES WITH THIS DRAWING TO THE CONTRACT ADMINISTRATOR IMMEDIATELY.
2. ALL MEASUREMENTS ARE IN METRES UNLESS OTHERWISE NOTED.
3. ALL WORK SHALL BE IN ACCORDANCE WITH THE RELEVANT SECTIONS OF THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS, AND THE NIAGARA PENINSULA STANDARD CONTRACT DOCUMENT (NPSCD) UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
4. COMPUTER DRAWING FILE CO-ORDINATES FOR THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION LAYOUT UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
5. ALL GRANULAR MATERIAL SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY AND ALL NATIVE BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY UNLESS OTHERWISE NOTED.
6. 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 ONTARIO TRAFFIC MANUAL - BOOK 7.
7. ALL EXCAVATION IN EXISTING ROADWAYS OR OTHER PAVED SURFACES SHALL BE BACKFILLED WITH GRANULAR 'A' COMPACTED TO 100% SPD. MINIMUM.
8. PROPOSED GRADES SHALL NOT ADVERSELY AFFECT ADJACENT PROPERTIES.
9. EXISTING SITE BOUNDARY AND TOPOGRAPHIC INFORMATION DERIVED BY SURVEY CARRIED OUT BY KIRKUP & URE SURVEYING AS SHOWN ON PLANS PROVIDED BY API DEVELOPMENT CONSULTANTS INC. FOR SITE LAYOUT AND DIMENSIONS. REFER TO LANDSCAPE DRAWINGS FOR PLANTING AND HARD LANDSCAPE DETAILS. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING.
10. REFER TO SITE PLAN BY API DEVELOPMENT CONSULTANTS INC. FOR SITE LAYOUT AND DIMENSIONS. REFER TO LANDSCAPE DRAWINGS FOR PLANTING AND HARD LANDSCAPE DETAILS. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING.
11. WHERE EXISTING FINISHED SURFACES ARE DISTURBED OR DAMAGED, REINSTATE AS FOLLOWS:
 - EXISTING PUBLIC ROADWAYS: COMPLY WITH REQUIREMENTS OF ROAD AUTHORITY, OPSS 310 AND OPSS 509.010. MINIMUM REQUIRED ASPHALT THICKNESSES TO MATCH EXISTING. PROVIDE TEMPORARY SURFACE REINSTATEMENT IN ACCORDANCE WITH ROAD AUTHORITY REQUIREMENTS.
 - EXISTING PRIVATE PAVED AREAS: COMPLY WITH PAVEMENT REQUIREMENTS AS SPECIFIED UNDER 'ROADS AND EARTHWORKS'.
 - EXISTING GRASSED AREAS: 100mm TOP SOIL PER OPSS 801 AND No. 1 NURSERY SOD PER OPSS 803.
 - EXISTING PLANTING AREAS: REINSTATE TO ORIGINAL CONDITION IN CONSULTATION WITH OWNER.

SILTATION/SEDIMENT CONTROL

13. ALL CONSTRUCTION SHALL BE CARRIED OUT IN SUCH A WAY THAT SILTATION OR OTHER DAMAGE TO WATER COURSES DOES NOT OCCUR. THE REQUIREMENTS OF THE N.P.C.A. AND MINISTRY OF NATURAL RESOURCES ARE TO BE ADHERED TO IN THIS RESPECT.
14. SILT FENCE PER OPSS 219.110 SHALL BE INSTALLED AS SHOWN PRIOR TO CONSTRUCTION AND SHALL BE MAINTAINED IN GOOD CONDITION UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED (I.E. RE-VEGETATED). AT NO TIME SHALL MUDDY WATER OR SILT BE ALLOWED TO DISCHARGE FROM THE SITE.
15. ALL CUT OR FILL MATERIAL, WHETHER ORIGINATING FROM THIS PROJECT OR ANOTHER SITE MUST NOT BE PLACED OR TEMPORARILY STORED OUTSIDE THE LIMIT OF SILT FENCING AS SHOWN ON THE DRAWINGS.
16. ALL DISTURBED AREAS SHALL BE STABILIZED AND RE-VEGETATED AS REQUIRED UPON COMPLETION OF WORK AND RESTORED TO A

PRE-DISTURBED STATE OR BETTER. NATIVE BACKFILLED AREAS TO BE REVEGETATED SHALL BE FREE OF GRANULAR PARTICLES OR OTHER MATERIALS DELETERIOUS TO PLANT GROWTH.

17. ALL CONSTRUCTION SHALL BE CARRIED OUT IN SUCH A WAY THAT SILTATION OR OTHER DAMAGE TO WATER COURSES DOES NOT OCCUR. THE REQUIREMENTS OF THE MINISTRY OF NATURAL RESOURCES ARE TO BE ADHERED TO IN THIS RESPECT. AT A MINIMUM, PROVIDE SILT FENCE AND STABILIZED CONSTRUCTION ACCESS AND MAINTAIN SAME FOR DURATION OF CONSTRUCTION. REMOVE CONSTRUCTION ACCESS GRANULAR FOLLOWING COMPLETION OF CONSTRUCTION, DISPOSE OFF SITE AND REINSTATE REG. RD. 55 BOULEVARD WITH MIN. 75mm TOPSOIL AND No. 1 NURSERY SOD. MAINTAIN SILT FENCE UNTIL GRASS OR OTHER GROUND COVER IS ESTABLISHED ADJACENT.

WATER SUPPLY

18. CONTRACTOR SHALL OBTAIN EXPLICIT APPROVAL FROM TOWN OF NIAGARA-ON-THE-LAKE WATER DEPARTMENT PRIOR TO MAKING A CONNECTION TO THE EXISTING TOWN WATERMAIN.
19. ALL WATERMAINS 100mm IN DIAMETER OR LARGER SHALL BE PVC OR PVCO, CERTIFIED TO CSA B137.3 OR 137.3 RESPECTIVELY, C10D, DR-18, CLASS 235 (RATED TO 235PSI); DELIVERED TO SITE WITH END-CAPS SECURELY IN PLACE. WATERMAIN TO BE INSTALLED PER OPSS-701 WITH CRUSHER-RUN GRANULAR 'A' BEDDING & COVER PER OPSS-802.010.
20. A MINIMUM CLEAR HORIZONTAL SEPARATION OF 2.5m SHALL BE MAINTAINED BETWEEN ANY SEWER & ANY PARALLEL WATERMAIN. A MINIMUM CLEAR VERTICAL SEPARATION OF 0.5m SHALL BE MAINTAINED AT SEWER CROSSINGS.
21. POTABLE WATER SERVICES TO BE 50mmØ (2"). WATER SERVICES SHALL BE TYPE 'K' SOFT COPPER OR MUNIOPLEX® OR APPROVED EQUIVALENT. MINIMUM COVER OVER WATERMAINS & SERVICES SHALL BE 1.5m UNLESS OTHERWISE INDICATED.
22. ALL METAL CROSSES, TEES, BENDS, VALVES AND OTHER FITTINGS SHALL HAVE CATHODIC PROTECTION CONSISTING OF ZINC ANODE 550-12 (12 LB). ALL HYDRANT ASSEMBLIES SHALL HAVE CATHODIC PROTECTION CONSISTING OF ZINC ANODE 1100-24 (24 LB).
23. ALL BENDS, TEES, HYDRANTS & OTHER FITTINGS AS REQUIRED SHALL HAVE THRUST BLOCKS IN ACCORDANCE WITH OPSS 1103.010 & 1103.020.
24. VALVES SHALL CONFORM TO AWWA C500 & C509 & SHALL BE IRON-BODY RESILIENT-SEATED GATE VALVES WITH 'O'-RING STEM PACKING, MECHANICAL JOINTED & SHALL OPEN LEFT-HANDED WITH 50mm SQUARE OPERATING NUT. VALVE BOXES SHALL BE CAST IRON, SLIDE TYPE.
25. FIRE HYDRANTS SHALL CONFORM TO OPSS 401 AND NPSCD SPECIAL PROVISION D3. HYDRANTS SHALL BE TWO-PIECE BARREL AND STEM WITH MINIMUM 1.7 METRE BURY AND SHALL BE SET WITH BOTTOM FLANGE BETWEEN 100 mm AND 200 mm ABOVE FINISHED GROUND. THEY SHALL HAVE TWO (2) 63 mm DIAMETER HOSE OUTLETS WITH CSA THREADS, ONE (1) 114 mm O.D. PUMPER NOZZLE WITH STORZ FITTING FOR QUICK CONNECTION AND SHALL OPEN LEFT-HANDED. THEY SHALL HAVE DRAIN HOLES OPEN AND SHALL BE PAINTED CHROME YELLOW. HYDRANTS SHALL BE DARLING B50, MCavity M-67, BIBBY 'SENTINEL' OR APPROVED EQUIVALENT.
26. ALL WATER SUPPLY PIPING SHALL BE FLUSHED, PRESSURE TESTED & DISINFECTED IN ACCORDANCE WITH OPSS 701 & NPSCD SPC-D13 UNDER THE DIRECTION OF THE TOWN'S ENGINEERING PERSONNEL & TO THE SATISFACTION OF THE TOWN DIRECTOR OF PUBLIC WORKS.
26. FOR ALL NON-METALLIC WATERMAINS AND SERVICES, 8-GAUGE COPPER TRACING WIRE SHALL BE INSTALLED ALONG THE SPRING-LINE ALONG ITS ENTIRE LENGTH, ALONG HYDRANT LEAD AND EXTENDED ABOVE EXPOSED FLANGE AT HYDRANT.

ROADS AND EARTHWORKS

27. FILL FOR ROADWAY AND PARKING AREAS TO BE CONSTRUCTED IN ACCORDANCE WITH OPSS 201 IN 200mm THICK LIFTS, USING SUITABLE NATIVE EXCAVATED OR IMPORTED MATERIAL APPROVED BY CONTRACT ADMINISTRATOR AND GEOTECHNICAL ENGINEER. THE SUBSOIL BELOW ANY ROADWAY OR PARKING AREA SHALL BE PROOF ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER OR HIS DESIGNATE PRIOR TO THE PLACEMENT OF ANY GRANULAR MATERIAL. THE UPPER 0.6m BELOW ANY RIGID OR PAVED SURFACE SHALL BE COMPACTED TO 98% SPD MIN.
28. ALL CURB SHALL BE UNDERLAIN WITH 100mmØ PERFORATED POLYETHYLENE PIPE PER OPSS 405, WRAPPED WITH POLYESTER FILTER SOCK AND GRANULAR SURROUND PER OPSS 216.021, OUTLETTING TO CATCHBASINS.
29. CURB IN ALL AREAS TO BE CONCRETE BARRIER CURB PER OPSS 600.110 AND OPSS 353, UNLESS NOTED OTHERWISE.

30. WHERE DISTURBED OR DAMAGED, REINSTATEMENT OF EXISTING ROADS SHALL COMPLY WITH THE REQUIREMENT OF THE ROAD AUTHORITY. PAVEMENT REINSTATEMENT SHALL COMPLY WITH OPSS 509.010 AND OPSS 310.

31. MINIMUM ASPHALT AND GRANULAR THICKNESS FOR ROAD AND PARKING AREA PER OPSS 310 & 314 AS FOLLOWS:

HEAVY-DUTY PAVEMENT STRUCTURE	
SURFACE COURSE	40mm HL3
BINDER COURSE	65mm HL8
GRANULAR 'A' BASE	200mm GRAN. 'A'
GRANULAR 'B' BASE	350mm GRAN. 'B'
TOTAL THICKNESS	605mm

LIGHT-DUTY PAVEMENT STRUCTURE	
SURFACE COURSE	65mm HL3
BINDER COURSE	N/A
GRANULAR 'A' BASE	150mm GRAN. 'A'
GRANULAR 'B' BASE	200mm GRAN. 'B'
TOTAL THICKNESS	415mm

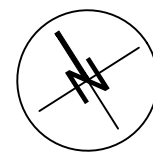
32. AREAS TO BE SODDED SHALL INCLUDE MINIMUM 75mm TOPSOIL PER OPSS 801. SOD TO BE IN ACCORDANCE WITH OPSS 803. NATIVE BACKFILLED AREAS TO BE SODDED SHALL BE FREE OF GRANULAR PARTICLES OR OTHER MATERIALS DELETERIOUS TO PLANT GROWTH.
33. THE PROVISIONS OF OPSS 710, OPSS 1713 (THERMOPLASTIC), OPSS 1714 (FIELD REACTED POLYMERIC) OR OPSS 1716 (WATERBORNE PAINT) SHALL APPLY FOR PAVEMENT MARKINGS EXCEPT AS AMENDED HEREIN. LINE MARKING SHALL BE APPLIED TO CONFORM TO THE PROVISIONS OF BOOK 11 - PAVEMENT, HAZARD AND DELINEATION MARKINGS, OF THE ONTARIO TRAFFIC MANUAL. PAVEMENT MARKINGS WHERE SPECIFIED AS PAINT SHALL BE YELLOW AND WHITE REFLECTORIZED WATER-BORNE TRAFFIC PAINT OR APPROVED EQUAL. REFLECTORIZED FIELD REACTED POLYMERIC ALSO KNOWN AS DURABLE SHALL BE USED AT INTERSECTIONS FOR CROSSWALKS, STOP BARS AND ALL LINES WITHIN 15 METRES OF THE STOP BARS. PAVEMENT PRE-MARKING SHALL BE UNDERTAKEN BY THE CONTRACTOR AND APPROVED BY THE ENGINEER'S SUPERVISOR. SIGNS & PAVEMENT MARKING OPERATIONS PRIOR TO THE APPLICATION OF PERMANENT MARKINGS. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY PRE-MARKINGS IMMEDIATELY FOLLOWING ASPHALT OPERATIONS. PAVEMENT MARKING REMOVAL WHERE REQUIRED SHALL MINIMIZE DAMAGE TO THE EXISTING PAVEMENT SURFACE. THE METHOD OF REMOVAL (SODA BLAST, SHOT BLAST OR GRINDING) SHALL BE APPROVED BY THE ENGINEER.

SEWERS

34. ALL SEWERS, LEADS AND LATERALS SHALL BE INSTALLED IN ACCORDANCE WITH OPSS 401. ALL FLEXIBLE PIPE TO HAVE CRUSHER-RUN GRANULAR 'A' EMBEDMENT PER OPSS 802.010 AND SELECT NATIVE BACKFILL COMPACTED TO TO 95% SPD. ALL GRANULAR MATERIAL TO BE COMPACTED TO 100% SPD UNLESS NOTED OTHERWISE.
35. ALL STORM SEWERS AND CATCHBASIN LEADS, 600mm DIAMETER OR LESS, TO BE CONCRETE, CLASS III PER CSA A257.2 WITH CLASS 'B' BEDDING TO OPSS 802.030 OR PVC DR-35 PER CSA 182.1 & 182.2 WITH CRUSHER-RUN GRANULAR 'A' BEDDING TO OPSS 802.010 UNLESS OTHERWISE NOTED.
36. STORM SEWERS 675mm DIAMETER AND LARGER TO BE CONCRETE PIPE, CLASS III PER CSA A257.2 WITH CLASS 'B' BEDDING TO OPSS 802.031 AND 802.033 OR HDPE PER CSA 182.6 WITH CRUSHER-RUN GRANULAR 'A' EMBEDMENT PER OPSS 802.010.
37. ALL SANITARY SEWERS TO BE PVC DR-35 PER CSA 182.2 WITH CRUSHER-RUN GRANULAR 'A' BEDDING TO OPSS 802.010 UNLESS OTHERWISE NOTED.
38. OIL AND GRIT SEPARATORS TO BE STORMCEPTOR MODEL STC-750 OR APPROVED EQUIVALENT.
39. COORDINATE CONNECTIONS TO EXISTING SEWERS WITH TOWN OF NIAGARA-ON-THE-LAKE PUBLIC WORKS STAFF AND QUARTEK GROUP INC.
40. ALL CONNECTIONS OF PVC SANITARY SEWER PIPE TO CONCRETE STRUCTURES SHALL BE BY MEANS OF KOR-N-SEAL SEALED RUBBER BOOT OR APPROVED EQUIVALENT.
41. SANITARY AND STORM MAINTENANCE HOLES SHALL BE PRECAST CONCRETE PER OPSS 1351. FRAME & COVER PER OPSS-401.010, TYPE 'A' (CLOSED) COMPLETE WITH BENCHING PER OPSS-701.021.
42. SINGLE CATCHBASIN LEADS TO BE 200mmØ WITH MIN. 0.5% SLOPE; DOUBLE CATCHBASIN LEADS TO BE 250mmØ @ 0.5% MIN. SLOPE; STORM AND SANITARY BUILDING LATERALS TO BE 150mmØ @ MIN. 1.0% UNLESS NOTED OTHERWISE

LEGEND

---	EXISTING PROPERTY LINE
- - - -	EXISTING ROAD
- - - -	EXISTING WATERMAIN
- - - -	EXISTING SANITARY SEWER
- - - -	EXISTING STORM SEWER
- - - -	EXISTING CULVERT
- - - -	EXISTING SURFACE CONTOUR
- - - -	EXISTING BELL
- - - -	EXISTING GAS
- - - -	EXISTING HYDRO
- - - -	PROPOSED SILT FENCE
- - - -	PROPOSED STORM SEWER
- - - -	PROPOSED WATER SERVICE
- - - -	PROPOSED WATERMAIN
- - - -	PROPOSED SANITARY SEWER
---	EXISTING ASPHALT ROAD
---	EXISTING CONCRETE TO REMAIN
---	EXISTING INTERLOCK DRIVEWAY
---	EXISTING GRAVEL DRIVEWAY
---	PROPOSED RETAINING WALL
---	PROPOSED HEAVY-DUTY PAVEMENT
---	PROPOSED LIGHT-DUTY PAVEMENT
CB	EX. CATCHBASIN
MH	EX. MAINTENANCE HOLE
MH	PROPOSED MAINTENANCE HOLE
SV	EX. SIGN POST
SV	EXISTING WATER VALVE
SV	PROPOSED WATER VALVE
CB	PROPOSED CATCHBASIN
FH	EXISTING HYDRANT
FH	PROPOSED HYDRANT AND VALVE
HP	EXISTING HYDRO POLE
BP	EXISTING BELL POLE
BELL	EXISTING BELL PEDESTAL
PED	EXISTING FOUND IRON BAR
FIB	EXISTING TREES
CS	EXISTING CURBSTOP
CS	PROPOSED CURBSTOP
CS	DIRECTION OF PIPE FLOW
CS	PROPOSED GRADE ARROW
CS	PROPOSED SURFACE ELEVATION
CS	EXISTING SURFACE ELEVATION
CS	PROPOSED LIGHT STANDARD



G	CONSTRUCTION RECORD	25 JULY 2018	KH
F	REVD RETAINING WALL	30 JUN 2017	JRP
E	REVD SITE MUNI ADDRESS	13 APR 2017	JRP
D	BUILDING PERMIT	24 FEB 2017	JRP
C	CONSTRUCTION	16 JAN 2017	JRP
B	TENDER	14 NOV 2016	JRP
A	REVIEW	07 NOV 2016	JRP
Issue	Issued for	date	init.

seal

Do not scale drawings. Report any discrepancies to Quartek Group Inc. before proceeding.

Drawings must be sealed by the Architect and / or Engineer prior to the use for any building permit applications and / or government approval. Seals must be signed by the Architect and / or Engineer. Drawings are used for any construction.

All construction to be in accordance with the current Ontario Building Code and all applicable Ontario regulations.

All drawings and related documents remain the property of Quartek Group Inc., all drawings are protected under copyright and under contract.

Quartek

Architects Planners
Engineers Project Managers

T. 905.984.8676
89 - 91 St. Paul Street, Suite 100,
St. Catharines, ON L2R 3M3
www.quartekgroup.com

project title

INTERCONTINENTAL COMBO HOTEL

524 YORK ROAD, NIAGARA-ON-THE-LAKE

drawing title

PROPOSED SITE SERVICES EXTENSION

PHASE 1

drawn by JTB/JRP/KH designed by JRP/DKP

scale 1:500 date 30 JAN 2015

job number 13254 issue G

drawing number 13254-EXT-1