PHASE 2 DRAINAGE INFORMATION SHOWN SHOWN FOR REFERENCE ONLY. GC SHALL REFER TO PHASE 2 CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.

UNDERGROUND STORMWATER MANAGEMENT AREAS SHALL BE INSTALLED PER MANUFACTURE SPECIFICATIONS. PRIOR TO CONSTRUCTION GC SHALL COORDINATE WITH MANUFACTURE AND NOTIFY THE DESIGN ENGINEER OF ANY CONFLICTS.

THE PURPOSE OF THIS CONSTRUCTION SKETCH IS TO SHOW THE REVISED UNDERGROUND STROMWATER MANAGEMENT AREAS AND REVISED STORMWATER INFORMATION. GC SHALL REFER TO THE LATEST PROPOSED SITE PLAN CONSTRUCTION DOCUMENTS, DATED 10/27/2022, PREPARED BY BOHLER AND ALL CONSTRUCTION SKETCHES ISSUED BY BOHLER FOR ADDITIONAL DESIGN INFORMATION.

20 10 5 0 20
1"= 20'

PROP. DMH-506
RIM=384.05
INV. IN=373.10 (DMH-807)
INV. IN=374.20 (OCS-500)
INV. OUT=373.00 (HW-500)

115.7' - 18" RCP @ 0.9%

CSK#5

RIM GRADE SHOWN IS FOR FINAL PHASE 2 ELEVATIONS. GC TO ADJUST RIM GRADE AS NEEDED FOR TEMPORARY GRADING DURING PHASE 1

284.7' - 18" RCP @ 0.9%

PROP. DMH-807
RIM=385.40
INV. IN=375.90 (DMH-807A)
INV. OUT=375.80 (DMH-506)

APPROX. LOCATION OF 250.0' WIDE ELECTRICAL EASEMENT

64.5' - 12" RCP @ 1.2%

PROP. DCB-502
RIM=381.65
INV. OUT=377.00 (DMH-501)

CROSSING:
DRAIN INV.=374.9±
SEWER CROWN=374.2±

PROP. OCS-500
(REFER TO DETAIL)
RIM=385.00
INV. IN=375.00 (UG2E)
INV. OUT=375.00 (DMH-506)

CB-504
(SHOWN FOR REFERENCE ONLY. TO BE CONSTRUCTED AS PART OF FUTURE PHASE.)

PROP. DCB-501
RIM=381.60
INV. OUT=376.50 (DMH-501)

59.3' - 12" RCP @ 1.1%

28.4' - 12" RCP @ 1.1%

158.7' - 15" RCP @ 1.1%

PROP. DMH-500
RIM=384.95
INV. IN=377.97 (CB-500)
INV. OUT=377.87 (DMH-501)

CROSSING:
15" DRAIN INV.=378.2±
18" DRAIN CROWN=377.6±

163.3' - 15" RCP @ 0.9%

RIM GRADE SHOWN IS FOR FINAL PHASE 2 ELEVATIONS. GC TO ADJUST RIM GRADE AS NEEDED FOR TEMPORARY GRADING DURING PHASE 1

APPROX. LOCATION OF PROP. ACCESS MANHOLE PRIOR TO CONSTRUCTION GC SHALL COORDINATE WITH GeoStorage AND NOTIFY THE DESIGN ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. GC SHALL REFER TO GRADING PLANS AND ESTABLISH RIM ELEVATIONS AT THE PROP. FINISH GRADE. (TYP. OF 2)

PROP. STORMWATER MANAGEMENT AREA (UG2e)
GEOSTORAGE UNDERGROUND STORMWATER DETENTION SYSTEM. (72.50' X 142.56')
GC IS RESPONSIBLE FOR PROVIDING SITE SPECIFIC SHOP DRAWINGS FROM THE MANUFACTURER FOR UNDERGROUND STORMWATER SYSTEMS TO THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.
FLOOR ELEV: 375.00
TOP OF STONE ELEV: 382.50
TOP OF CONCRETE ELEV: 383.33

PROP. DMH-501
RIM=382.41
INV. IN=376.20 (DCB-502)
INV. IN=376.20 (DMH-500)
INV. IN=376.20 (DCB-501)
INV. OUT=376.10 (DMH-502)

PROP. CB-500
RIM=383.42
INV. OUT=379.40 (DMH-500)

55.6' - 24" RCP @ 0.0%

GC SHALL PROVIDE WATER QUALITY SAND FILTER AT THE BOTTOM OF THE PROP. OPEN CHAMBER. (REFER TO PLANS PREPARED BY GEOSTORAGE ENGINEERING, LLC FOR DETAIL.)

INV. OUT=375.00 (OCS-500)

PROP. OPEN CHAMBER (TYP). GC SHALL WRAP BOTTOM AND 2' UP THE SIDE WALLS WITH NON-WOVEN GEOTEXTILE FABRIC (377.0). (REFER TO PLANS PREPARED BY GEOSTORAGE ENGINEERING, LLC FOR DETAIL.)

PROP. CONCRETE ROOF DECK. REFER TO PLANS PREPARED BY GeoStorage ENGINEERING, LLC FOR DETAIL.)

DMH-507
(SHOWN FOR REFERENCE ONLY. TO BE CONSTRUCTED AS PART OF FUTURE PHASE.)

INV IN=375.0 (DMH-503)

GC IS RESPONSIBLE FOR PROVIDING STUB FOR CONNECTION OF FUTURE PHASE. STUB SHALL BE CAPPED AND MADE WATER TIGHT.

INV IN=375.0 (CB-507)

37.33'

13.33'

CB-505
(SHOWN FOR REFERENCE ONLY. TO BE CONSTRUCTED AS PART OF FUTURE PHASE.)

GC SHALL PROVIDE RIP-RAP AT INLETS TO PREVENT SCOURING OF BASE MATERIALS. (REFER TO PLANS PREPARED BY GEOSTORAGE ENGINEERING, LLC FOR DETAIL.)

37.9' - 24" RCP @ 0.0%

9.5' - 12" RCP @ 2.1%

112.9' - 24" RCP @ 0.6%

CROSSING:
SEWER INV.=379.1±
DRAIN CROWN=377.7±

PROP. DMH-800A
RIM=389.08
INV. IN=382.30 (CB-803)
INV. IN=383.30 (DMH-800)
INV. OUT=382.31 (DMH-802)

63.6' - 12" RCP @ 0.5%

188.6' - 15" RCP @ 0.6%

PROP. DCB-802A
RIM=387.71
INV. OUT=383.80 (DMH-802A)

14.2' - 15" RCP @ 0.7%

43.8' - 18" RCP @ 0.7%

PROP. DMH-802
RIM=388.55
INV. IN=382.00 (DMH-800A)
INV. IN=382.00 (DMH-802A)
INV. OUT=380.40 (DMH-802B)

PROP. DMH-802A
RIM=388.03
INV. IN=383.00 (DCB-802)
INV. IN=383.70 (DCB-802A)
INV. OUT=382.50 (DMH-802)

39.3' - 18" RCP @ 1.3%

46.7' - 24" RCP @ 0.6%

PROP. DMH-503
RIM=384.69
INV. IN=375.20 (DMH-502)
INV. IN=376.20 (DMH-507)
INV. OUT=375.20 (UG2e)

PROP. DMH-502
RIM=384.96
INV. IN=380.60 (DMH-504)
INV. IN=375.50 (DMH-501)
INV. IN=377.00 (FES-500)
INV. OUT=375.50 (DMH-503)

CROSSING:
SEWER INV.=379.3±
DRAIN CROWN=378.3±
REFER TO CONSTRUCTION SKETCH #3 FOR DETAIL

126.8' - 12" RCP @ 1.0%

PROP. FES-500
INV. OUT=378.30 (DMH-502)

165.1' @ -25% - 21" X 15"

CROSSING:
DRAIN INV.=381.8±
SEWER CROWN=380.2±

PROP. DMH-504
RIM=385.94
INV. IN=381.70 (CB-503A)
INV. IN=381.70 (CB-503)
INV. OUT=381.60 (DMH-502)

18.4' - 12" RCP @ 1.6%

PROP. CB-503A
RIM=385.87
INV. OUT=382.00 (DMH-504)

PROP. CB-503
RIM=385.87
INV. OUT=382.00 (DMH-504)

25.6' - 12" RCP @ 1.2%

121.9' - 12" RCP @ 2.1%

CB-507
(SHOWN FOR REFERENCE ONLY. TO BE CONSTRUCTED AS PART OF FUTURE PHASE.)

PROP. BOTTOM FLOOR SURFACE (57.50' x 127.56') (REFER TO PLANS PREPARED BY GEOSTORAGE ENGINEERING, LLC FOR DETAIL.)

GC IS RESPONSIBLE FOR PROVIDING STUB FOR CONNECTION OF FUTURE PHASE. STUB SHALL BE CAPPED AND MADE WATER TIGHT.

BASIN #	OCS #	RIM	INV. IN	WEIR ELEV.	ORIFICE SIZE (IN.)	ORIFICE INV.	OUTLET PIPE SIZE (IN.) *	OUTLET INV.
UG2e	500	*	*	381.90	5" DIAM.	379.30	12	375.00
UG3c	800	*	*	386.50	N/A	N/A	18	379.00

* VARIES - SEE CONSTRUCTION SKETCH # 5

RIM = VARIES
SEE CONSTRUCTION SKETCH # 5

4' WIDE CONCRETE/ BRICK OUTLET WALL ANCHOR WALL SECURELY TO STRUCTURE AND PROVIDE WATERTIGHT CONNECTIONS AT JOINTS.

TO BE SIZED BY CONTRACTOR

ELEV. = SEE TABLE

12" MIN.

ORIFICE
ELEV. = SEE TABLE

6" ORIFICE WITH PLUG FOR EMERGENCY MAINTENANCE PURPOSES. PLUG SHALL IN PLACE IN SECURE TO PREVENT FLOW OF WATER THROUGH ORIFICE PRIOR TO DISCHARGING WATER TO UNDERGROUND SYSTEM

INLET PIPE

ELEVATION (B-B SECTION)

OUTLET PIPE

4" WIDE CONCRETE/ BRICK OUTLET WALL WITH WATERTIGHT CONNECTIONS AT JOINTS

INLET PIPE

PLAN VIEW
(OCS-500)

OUTLET PIPE

4" WIDE CONCRETE/ BRICK OUTLET WALL WITH WATERTIGHT CONNECTIONS AT JOINTS

INLET PIPE

PLAN VIEW
(OCS-800)

CSK#5

SUBSURFACE SYSTEM OUTLET CONTROL STRUCTURE DETAIL

N.T.S.

PROP. DMH-807A
RIM=388.88
INV. IN=378.40 (OCS-800)
INV. OUT=378.40 (DMH-807)

PROP. OCS-800
(REFER TO DETAIL)
RIM=389.60
INV. IN=379.00 (UG3C)
INV. OUT=379.00 (DMH-807A)

19.3' - 24" RCP @ 0.0%

INV. IN =379.00 (DMH-804)

APPROX. LOCATION OF 250.0' WIDE ELECTRICAL EASEMENT

PROP. DCB-802
RIM=387.72
INV. OUT=383.80 (DMH-802A)

GC SHALL PROVIDE WATER QUALITY SAND FILTER AT THE BOTTOM OF THE PROP. OPEN CHAMBER. (REFER TO PLANS PREPARED BY GEOSTORAGE ENGINEERING, LLC FOR DETAIL.)

PROP. BOTTOM FLOOR SURFACE (90.25' x 225.03') (REFER TO PLANS PREPARED BY GEOSTORAGE ENGINEERING, LLC FOR DETAIL.)

212.83'

PROP. OPEN CHAMBER (TYP). GC SHALL WRAP BOTTOM AND 2' UP THE SIDE WALLS WITH NON-WOVEN GEOTEXTILE FABRIC (381.0) (REFER TO PLANS PREPARED BY GEOSTORAGE ENGINEERING, LLC FOR DETAIL.)

PROP. CONCRETE ROOF DECK. (REFER TO PLANS PREPARED BY GeoStorage ENGINEERING, LLC FOR DETAIL.)

APPROX. LOCATION OF PROP. ACCESS MANHOLE PRIOR TO CONSTRUCTION GC SHALL COORDINATE WITH GeoStorage AND NOTIFY THE DESIGN ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. GC SHALL REFER TO GRADING PLANS AND ESTABLISH RIM ELEVATIONS AT THE PROP. FINISH GRADE. (TYP. OF 4)

69.6' - 18" RCP @ 1.0%

GC SHALL PROVIDE RIP-RAP AT INLETS TO PREVENT SCOURING OF BASE MATERIALS. (REFER TO PLANS PREPARED BY GEOSTORAGE ENGINEERING, LLC FOR DETAIL.)

INV. OUT=379.00 (OCS-800)

PROP. STORMWATER MANAGEMENT AREA (UG3c) (106.75' x 241.53')
GeoStorage UNDERGROUND STORMWATER DETENTION SYSTEM.
GC IS RESPONSIBLE FOR PROVIDING SITE SPECIFIC SHOP DRAWINGS FROM THE MANUFACTURER FOR UNDERGROUND STORMWATER SYSTEMS TO THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.
FLOOR ELEV: 379.00
TOP OF STONE ELEV: 387.25
TOP OF CONCRETE ELEV: 388.08

PROP. DMH-804
RIM=390.82
INV. IN=382.50 (DMH-806)
INV. IN=384.50 (DMH-803)
INV. OUT=379.40 (UG3c)

CROSSING:
DRAIN INV.=384.0±
SEWER CROWN=382.8±

116.2' - 15" RCP @ 2.1%

PROP. DMH-802B
RIM=389.46
INV. IN=380.10 (DMH-802)
INV. IN=382.10 (DMH-801A)
INV. OUT=379.20 (UG3c)

156.2' - 15" RCP @ 0.5%

INV. IN =379.00 (DMH-802B)

19.6' - 24" RCP @ 1.0%

182.7' - 15" RCP @ 2.9%

43.9' - 15" RCP @ 2.7%

126.7' - 18" RCP @ 2.1%

PROP. DMH-806
RIM=391.79
INV. IN=387.60 (RD-802)
INV. OUT=384.90 (DMH-804)

P:\21W\211141\DRAWINGS\PLAN SET\99-CONSTRUCTION DRAWINGS - PHASE 1\REVIZ\W211141-CVL-2_PHASE 1_DRAN----LAYOUT: CSK5

AS

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/24/2023	PEER REVIEW COMMENTS	AJS / NM / JK

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ISSUED FOR CONSTRUCTION

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PROJECT No.:	W211141
DRAWN BY:	AJS
CHECKED BY:	KC / JAK
DATE:	12/20/2022
CAD I.D.:	W211141-CVL-2_PHASE 1_DRAN

PROJECT:
PROPOSED SITE PLAN CONSTRUCTION DOCUMENTS
FOR
UNIFIED² GLOBAL PACKAGING GROUP

INDUSTRIAL DEVELOPMENT
BUILDING 3

UNIFIED PARKWAY
TOWN OF SUTTON
WORCESTER COUNTY,
MASSACHUSETTS

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SHEET TITLE:
CONSTRUCTION SKETCH #5

SHEET NUMBER:
CSK5

REVISION 1 - 01/24/2023