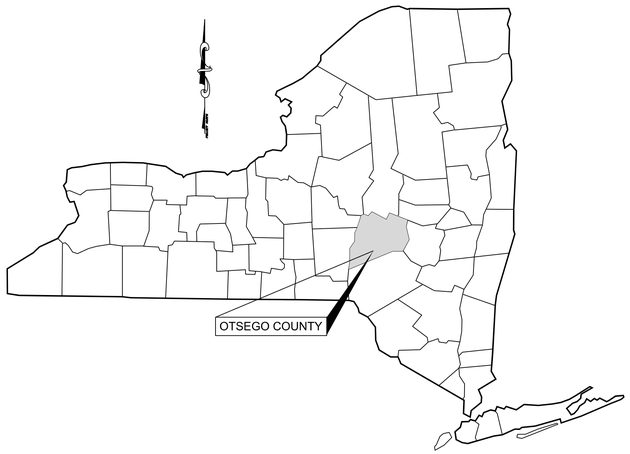

HILLSIDE COMMONS STUDENT HOUSING

PRELIMINARY SITE PLAN

BLODGETT DRIVE

CITY OF ONEONTA

COUNTY OF OTSEGO STATE OF NEW YORK

OWNER

NEWMAN DEVELOPMENT GROUP, LLC
300 PLAZA DRIVE
VESTAL, NEW YORK 13851
(607) 770-0155

INDEX OF DRAWINGS

SHEET	TITLE
ESC-1	EXISTING SITE CONDITIONS
C010	EXISTING SURFACE DRAINAGE PLAN
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C110	EROSION & SEDIMENT CONTROL PLAN
C111	EROSION & SEDIMENT CONTROL PLAN
C120	GRADING PLAN
C130	UTILITY PLAN
C131	OFFSITE WATERLINE PLAN & PROFILE
C140	CONSTRUCTION STAGING PLAN
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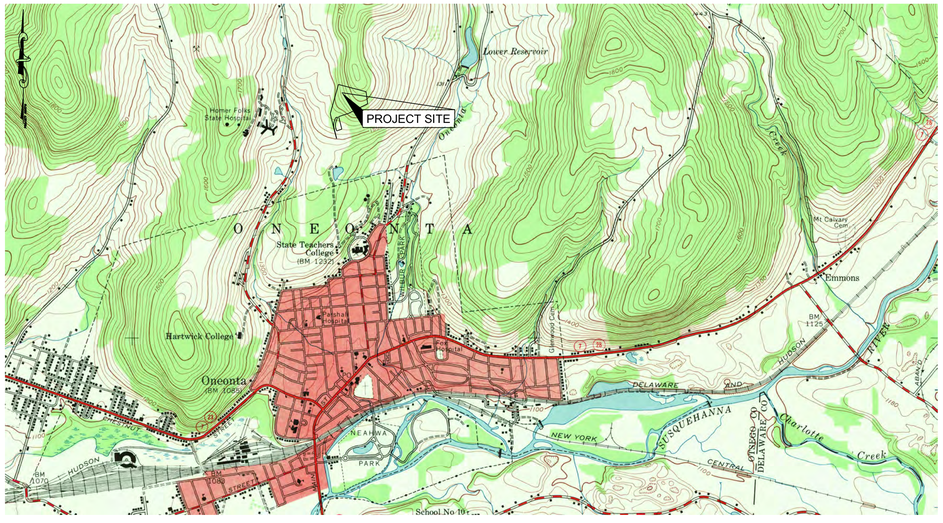
C210	STORMWATER SECTIONS & DETAILS
C220	SITE DETAILS
C221	SITE DETAILS
C222	SITE DETAILS
C300	SPECIFICATIONS
WLS-8905	SITE LIGHTING (PREPARED BY WLS LIGHTING SYSTEMS)



LOCATION MAP
NOT TO SCALE

DRAWINGS PREPARED BY

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www.keyscomp.com

PROJECT NO. 200.26412

FEBRUARY 20, 2013
REVISED APRIL 12, 2013
REVISED APRIL 26, 2013

TRUE NORTH
AT THE 74°05' MERIDIAN
OF WEST LONGITUDE

NOTES

1) PREMISES SOURCE OF TITLE BEING L.748 P.536, RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE OCT. 5, 1990. BEING TAX MAP NUMBERS 288.6-1-2, 3 & 62.

2) SUBJECT TO THE FOLLOWING EASEMENTS AND/OR RIGHT OF WAYS AS RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE:

- RIGHT OF WAY GRANTED FOR INGRESS AND EGRESS TO GAIN ACCESS TO EAST STREET PER LIBER 748 OF DEEDS AT PAGE 536, RECORDED OCT. 5, 1990.
- EASEMENT GRANTED TO NEW YORK STATE ELECTRIC AND GAS CORPORATION PER LIBER 645 OF DEEDS AT PAGE 976, RECORDED OCT. 3, 1975.

3) SUBJECT TO ANY AND ALL OTHER EASEMENTS OF RECORD AND/OR AS FOUND IN THE FIELD.

4) THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE TO THE PROPERTY. A TITLE REPORT PREPARED BY CHICAGO TITLE INSURANCE COMPANY NUMBER 2903-30151 DATED MARCH 20, 2009 WAS PROVIDED.

5) DATUM REFERNCES:
- HORIZONTAL DATUM = NYS EASTERN ZONE / NAD 83 (FEET)
- VERTICAL DATUM = NYS EASTERN ZONE / NAVD 88 (FEET) (GEOID 09)

LEGEND

- MONUMENT FOUND AND NOTED
- BENCHMARK
- N/F NOW OR FORMERLY
- TM# TAX MAP NUMBER
- UTILITY POLE
- UTILITY POLE WITH LIGHT
- GUY WIRE
- PROPERTY LINE
- DEED LINE
- OHW OVERHEAD UTILITIES
- SAN SANITARY SEWER LINE
- STORM STORM SEWER LINE
- GAS GAS LINE
- WTR WATER LINE
- SINGLE POST SIGN
- GAS LINE MARKER
- SANITARY SEWER MANHOLE
- CLEAN OUT
- DRAINAGE MANHOLE
- CATCH BASIN
- WATER LINE MARKER
- WATER VALE
- WATER SERVICE SHUT OFF
- FIRE HYDRANT
- DECIDUOUS TREE
- CHAIN LINK FENCE
- TREE LINE

REFERENCE DATA

1) MAP ENTITILED "STATE UNIVERSITY OF NEW YORK, STATE UNIVERSITY COLLEGE AT ONEONTA, OTSEGO COUNTY, MAP NO. 62" PREPARED BY LEON KALMUS, L.S., DATED APRIL 7, 1969. RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE IN L.605 P.832, AUGUST 28, 1969.

2) MAP ENTITLED "EXTENSION OF BLODGETT DRIVE, SITUATE IN CITY OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED OCTOBER 7, 1975.

3) "MAP OF LOT SPLIT OF ALBERT E. FARONE AND ANGELA T. FARONE, DEED REFERENCES AS SHOWN, SITUATE IN CITY OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED OCTOBER 7, 1975.

4) "MAP OF LOT SPLIT OF PROPERTY OF ALBERT E. FARONE AND ANGELA T. FARONE, DEED REFERENCES AS SHOWN, SITUATE IN TOWN OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED OCTOBER 7, 1975.

5) "MAP OF LOT SPLIT OF PROPERTY OF ALBERT E. FARONE AND ANGELA T. FARONE, DEED REFERENCES AS SHOWN, SITUATE IN TOWN OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED OCTOBER 7, 1975 AND REVISED JULY 13, 1976 AND RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE ON MAY 11, 1976 AS MAP NO. 996.

6) MAP ENTITLED "EXTENSION OF BLODGETT DRIVE AND FARONE DRIVE, SITUATE IN CITY OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED JANUARY 16, 1978. RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE IN L.673 P.760, APRIL 21, 1980.

7) "MAP OF LOT SPLIT OF ALBERT E. FARONE AND ANGELA T. FARONE, SITUATE IN TOWN AND CITY OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED JANUARY 16, 1978.

8) "MAP OF LANDS OF ALBERT E. FARONE AND ANGELA T. FARONE, SITUATE IN TOWN AND CITY OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED JANUARY 16, 1978.

9) "MAP OF LAND ANNEXED BY THE CITY OF ONEONTA, SITUATE IN TOWN OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED AUGUST 31, 1978.

10) "MAP OF LAND TO BE DEMISED BY THE TOWN OF ONEONTA, SITUATE IN TOWN OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED OCTOBER 29, 1979. RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE ON DECEMBER 20, 1979 AS MAP NO. 1044.

11) "MAP OF LAND TO BE ANNEXED BY THE CITY OF ONEONTA FROM THE TOWN OF ONEONTA, SITUATE IN TOWN OF ONEONTA, OTSEGO CO., NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED OCTOBER 29, 1979. RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE ON DECEMBER 20, 1979 AS MAP NO. 1045.

12) "MAP OF LAND TO BE CONVEYED TO LYNN PARSONS, SITUATE IN TOWN OF ONEONTA, OTSEGO COUNTY, NEW YORK STATE" PREPARED BY JAMES R. BARTSCHI L.S., DATED MAY 25, 1983.

13) MAP ENTITLED "SUBDIVISION OF THE LANDS OF KENNETH D. HUNT & LENA K. HUNT L.621 P.1044, LOCATED WITHIN THE TOWN OF ONEONTA, OTSEGO COUNTY, STATE OF NEW YORK" PREPARED BY SHERET SURVEYING 7 ENGINEERING DATED JANUARY 1988. RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE JANUARY 1988 AS MAP NO. 2106.

14) MAP ENTITLED "SUBDIVISION MAP DIVISION OF PREMISES OF CAROLYN A. COLLINS, DEED REFERENCE LIBER 556 PAGE 48, TAX MAP REFERENCE 275.00-1-12, SITUATE IN THE TOWN OF ONEONTA, COUNTY OF OTSEGO, STATE OF NEW YORK" PREPARED BY WILLIAM RASMUSSEN L.S., DATED FEBRUARY 5, 1991. RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE ON APRIL 16, 1991 AS MAP NO. 2876(1) AND 2876(2).

15) MAP ENTITLED "STATE UNIVERSITY COLLEGE AT ONEONTA, ONEONTA, N.Y., SURVEY MAP SHOWING A PORTION OF THE EAST BOUNDARY, PREPARED FOR KOTZ AND ASSOCIATES SYRACUSE, N.Y., PREPARED BY WILLIAM RASMUSSEN P.L.S." DATED MAY 19, 1998

16) "MAP SHOWING A SURVEY OF LANDS OF EUGENE A. BETTIOL, SR. AND ELIZABETH A. BETTIOL, LIBER 914 @ PAGE 306, LIBER 922 @ PAGE 231, SITUATE IN TOWN OF ONEONTA, COUNTY OF OTSEGO, STATE OF NEW YORK" PREPARED BY KAATSKILL MOUNTAIN SURVEYORS, LLP, LAND SURVEYORS & GPS SPECIALISTS, DATED JUNE 20, 2001. RECORDED IN THE OTSEGO COUNTY CLERK'S OFFICE ON SEPTEMBER 15, 2005 AS MAP NO. 5536.

PARCEL 1
593,527 SQ.FT.
13.625± ACRES

PARCEL 2
12,804 SQ.FT.
0.294± ACRE

CURVE DATA
CT
R=1.08'
L=26.37'
CH=N61°21'32"W
CL=23.52'

THE USER OF THIS MAP IS CAUTIONED THAT THE UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA ARE SHOWN ON THIS DRAWING.

THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK & SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM HIS WORK. CONTRACTOR SHALL NOTIFY DIG SAFELY NY (FORMERLY UFPO) 1-800-962-7962 IN ACCORDANCE WITH 16 NYCRR PART 753.

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

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www.keyscomp.com

NO.	SUBMISSION / REVISION	DATE

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA — OTSEGO COUNTY, NY

EXISTING SITE CONDITIONS

SHEET NO.
ESC-1

PROJECT NO.
200.26412

DATE: 02/22/13

CAD FILE NO.: EXSITECOM.DWG

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NO.	REVISIONS AND DESCRIPTIONS	DATE:
3	RE-SUBMITTAL PACKAGE	4/26/13
2	REV. 3/26/13 CITY LETTER	4/12/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA OTSEGO COUNTY, NY

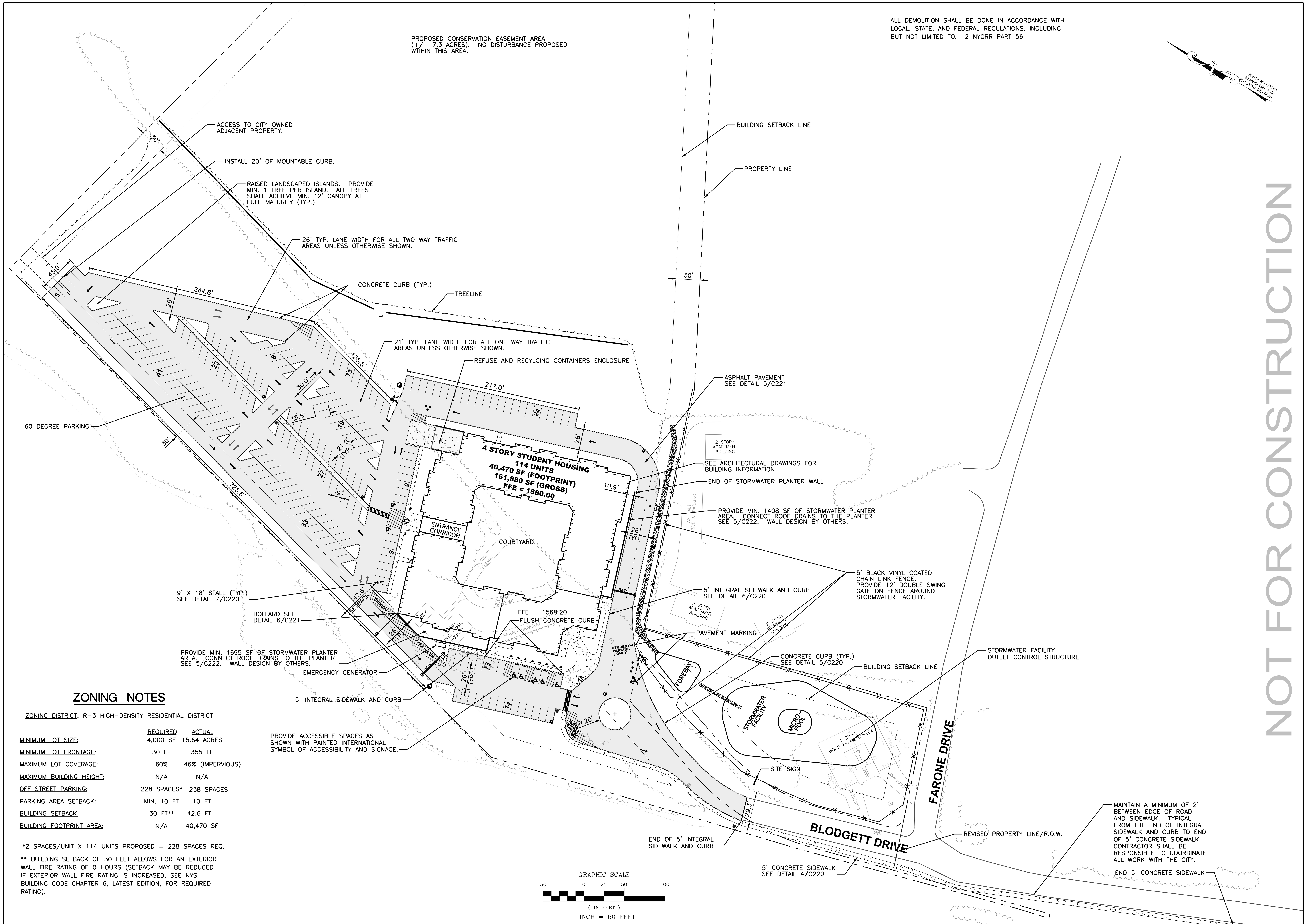
EXISTING SURFACE DRAINAGE PLAN

SHEET NO.
C010

PROJECT NO.
200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN


ALL DEMOLITION SHALL BE DONE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS, INCLUDING BUT NOT LIMITED TO; 12 NYCRR PART 56
PROPOSED CONSERVATION EASEMENT AREA (+/- 7.3 ACRES). NO DISTURBANCE PROPOSED WTIHIN THIS AREA.
ACCESS TO CITY OWNED ADJACENT PROPERTY.
INSTALL 20' OF MOUNTABLE CURB.
RAISED LANDSCAPED ISLANDS. PROVIDE MIN. 1 TREE PER ISLAND. ALL TREES SHALL ACHIEVE MIN. 12' CANOPY AT FULL MATURITY (TYP.)
26' TYP. LANE WIDTH FOR ALL TWO WAY TRAFFIC AREAS UNLESS OTHERWISE SHOWN.
CONCRETE CURB (TYP.)
TREELINE
21' TYP. LANE WIDTH FOR ALL ONE WAY TRAFFIC AREAS UNLESS OTHERWISE SHOWN.
REFUSE AND RECYCLING CONTAINERS ENCLOSURE
BUILDING SETBACK LINE
PROPERTY LINE
ASPHALT PAVEMENT SEE DETAIL 5/C221
60 DEGREE PARKING
4 STORY STUDENT HOUSING
114 UNITS
40,470 SF (FOOTPRINT)
161,880 SF (GROSS)
FFE = 1580.00
ENTRANCE CORRIDOR
COURTYARD
SEE ARCHITECTURAL DRAWINGS FOR BUILDING INFORMATION
END OF STORMWATER PLANTER WALL
PROVIDE MIN. 1408 SF OF STORMWATER PLANTER AREA. CONNECT ROOF DRAINS TO THE PLANTER SEE 5/C222. WALL DESIGN BY OTHERS.
5' BLACK VINYL COATED CHAIN LINK FENCE. PROVIDE 12' DOUBLE SWING GATE ON FENCE AROUND STORMWATER FACILITY.
9' X 18' STALL (TYP.) SEE DETAIL 7/C220
5' INTEGRAL SIDEWALK AND CURB SEE DETAIL 6/C220
BOLLARD SEE DETAIL 6/C221
FFE = 1568.20
FLUSH CONCRETE CURB
PAVEMENT MARKING
PROVIDE MIN. 1695 SF OF STORMWATER PLANTER AREA. CONNECT ROOF DRAINS TO THE PLANTER SEE 5/C222. WALL DESIGN BY OTHERS.
EMERGENCY GENERATOR
CONCRETE CURB (TYP.) SEE DETAIL 5/C220
BUILDING SETBACK LINE
STORMWATER FACILITY OUTLET CONTROL STRUCTURE
5' INTEGRAL SIDEWALK AND CURB
FOREBAY
STORMWATER FACILITY
MICRO-POOL
PROVIDE ACCESSIBLE SPACES AS SHOWN WITH PAINTED INTERNATIONAL SYMBOL OF ACCESSIBILITY AND SIGNAGE.
SITE SIGN
FARONE DRIVE
BLODGETT DRIVE
REVISED PROPERTY LINE/R.O.W.
MAINTAIN A MINIMUM OF 2' BETWEEN EDGE OF ROAD AND SIDEWALK. TYPICAL FROM THE END OF INTEGRAL SIDEWALK AND CURB TO END OF 5' CONCRETE SIDEWALK. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL WORK WITH THE CITY.
END OF 5' INTEGRAL SIDEWALK AND CURB
5' CONCRETE SIDEWALK SEE DETAIL 4/C220
END 5' CONCRETE SIDEWALK
GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 INCH = 50 FEET
NOT FOR CONSTRUCTION

ZONING NOTES

ZONING DISTRICT: R-3 HIGH-DENSITY RESIDENTIAL DISTRICT

	REQUIRED	ACTUAL
MINIMUM LOT SIZE:	4,000 SF	15.64 ACRES
MINIMUM LOT FRONTAGE:	30 LF	355 LF
MAXIMUM LOT COVERAGE:	60%	46% (IMPERVIOUS)
MAXIMUM BUILDING HEIGHT:	N/A	N/A
OFF STREET PARKING:	228 SPACES*	238 SPACES
PARKING AREA SETBACK:	MIN. 10 FT	10 FT
BUILDING SETBACK:	30 FT**	42.6 FT
BUILDING FOOTPRINT AREA:	N/A	40,470 SF

*2 SPACES/UNIT X 114 UNITS PROPOSED = 228 SPACES REQ.

** BUILDING SETBACK OF 30 FEET ALLOWS FOR AN EXTERIOR WALL FIRE RATING OF 0 HOURS (SETBACK MAY BE REDUCED IF EXTERIOR WALL FIRE RATING IS INCREASED, SEE NYS BUILDING CODE CHAPTER 6, LATEST EDITION, FOR REQUIRED RATING).

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KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

NO.	REVISIONS AND DESCRIPTIONS	DATE:
3	RE-SUBMITTAL PACKAGE	4/26/13
2	REV. 3/26/13 CITY LETTER	4/12/13
1	REVISED TO PRELIMINARY PLAN	2/20/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA **OTSEGO COUNTY, NY**

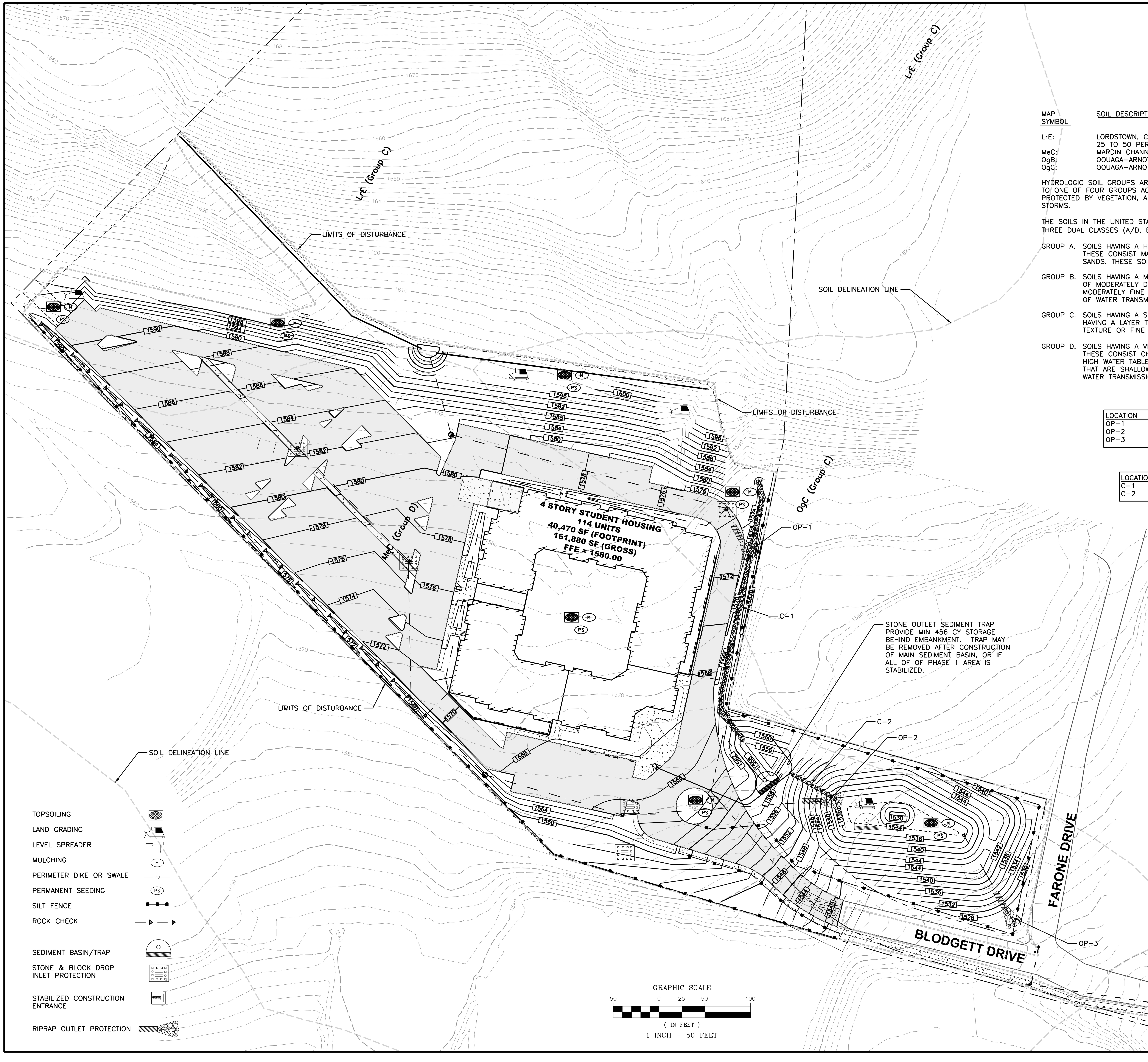
LAYOUT & DIMENSION PLAN

SHEET NO.
C100

PROJECT NO.
200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN



MAP SYMBOL	SOIL DESCRIPTION	SOIL GROUP
LrE:	LORDSTOWN, CHADAKOIN, AND MANLIUS SOILS, 25 TO 50 PERCENT SLOPES, VERY ROCKY	C
MeC:	MARDIN CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES	D
OgB:	OQUAGA-ARNOT COMPLEX, 1 TO 8 PERCENT SLOPES, ROCKY	C
OgC:	OQUAGA-ARNOT COMPLEX, 8 TO 15 PERCENT SLOPES, ROCKY	C

HYDROLOGIC SOIL GROUPS ARE BASED ON ESTIMATES OF RUNOFF POTENTIAL. SOILS ARE ASSIGNED TO ONE OF FOUR GROUPS ACCORDING TO THE RATE OF WATER INFILTRATION WHEN THE SOILS ARE NOT PROTECTED BY VEGETATION, ARE THOROUGHLY WET, AND RECEIVE PRECIPITATION FROM LONG-DURATION STORMS.

THE SOILS IN THE UNITED STATES ARE ASSIGNED TO FOUR GROUPS (A, B, C, AND D) AND THREE DUAL CLASSES (A/D, B/D, AND C/D). THE GROUPS ARE DEFINED AS FOLLOWS:

GROUP A. SOILS HAVING A HIGH INFILTRATION RATE (LOW RUNOFF POTENTIAL) WHEN THOROUGHLY WET. THESE CONSIST MAINLY OF DEEP, WELL DRAINED TO EXCESSIVELY DRAINED SANDS OR GRAVELLY SANDS. THESE SOILS HAVE A HIGH RATE OF WATER TRANSMISSION.

GROUP B. SOILS HAVING A MODERATE INFILTRATION RATE WHEN THOROUGHLY WET. THESE CONSIST CHIEFLY OF MODERATELY DEEP OR DEEP, MODERATELY WELL DRAINED OR WELL DRAINED SOILS THAT HAVE MODERATELY FINE TEXTURE TO MODERATELY COARSE TEXTURE. THESE SOILS HAVE A MODERATE RATE OF WATER TRANSMISSION.

GROUP C. SOILS HAVING A SLOW INFILTRATION RATE WHEN THOROUGHLY WET. THESE CONSIST CHIEFLY OF SOILS HAVING A LAYER THAT IMPEDES THE DOWNWARD MOVEMENT OF WATER OR SOILS OF MODERATELY FINE TEXTURE OR FINE TEXTURE. THESE SOILS HAVE A SLOW RATE OF WATER TRANSMISSION.

GROUP D. SOILS HAVING A VERY SLOW INFILTRATION RATE (HIGH RUNOFF POTENTIAL) WHEN THOROUGHLY WET. THESE CONSIST CHIEFLY OF CLAYS THAT HAVE A HIGH SHRINK-SWELL POTENTIAL, SOILS THAT HAVE A HIGH WATER TABLE, SOILS THAT HAVE A CLAYPAN OR CLAY LAYER AT OR NEAR THE SURFACE, AND SOILS THAT ARE SHALLOW OVER NEARLY IMPERVIOUS MATERIAL. THESE SOILS HAVE A VERY SLOW RATE OF WATER TRANSMISSION.

OUTLET PROTECTION TABLE

LOCATION	MIN. STONE SIZE	LENGTH	WIDTH1	WIDTH2
OP-1	0.5'	40'	4.5'	17.5'
OP-2	1.0'	10'	6.0'	6.0'
OP-3	0.5'	40'	4.5'	17.5'

CHANNEL PROTECTION TABLE

LOCATION	STONE DEPTH	NYSDEC RIPRAP GRADATION
C-1	27"	II
C-2	27"	II

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NO.	REVISIONS AND DESCRIPTIONS	DATE:
3	RE-SUBMITTAL PACKAGE	4/26/13
2	REV. 3/26/13 CITY LETTER	4/12/13
1	REVISED TO PRELIMINARY PLAN	2/20/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA OTSEGO COUNTY, NY

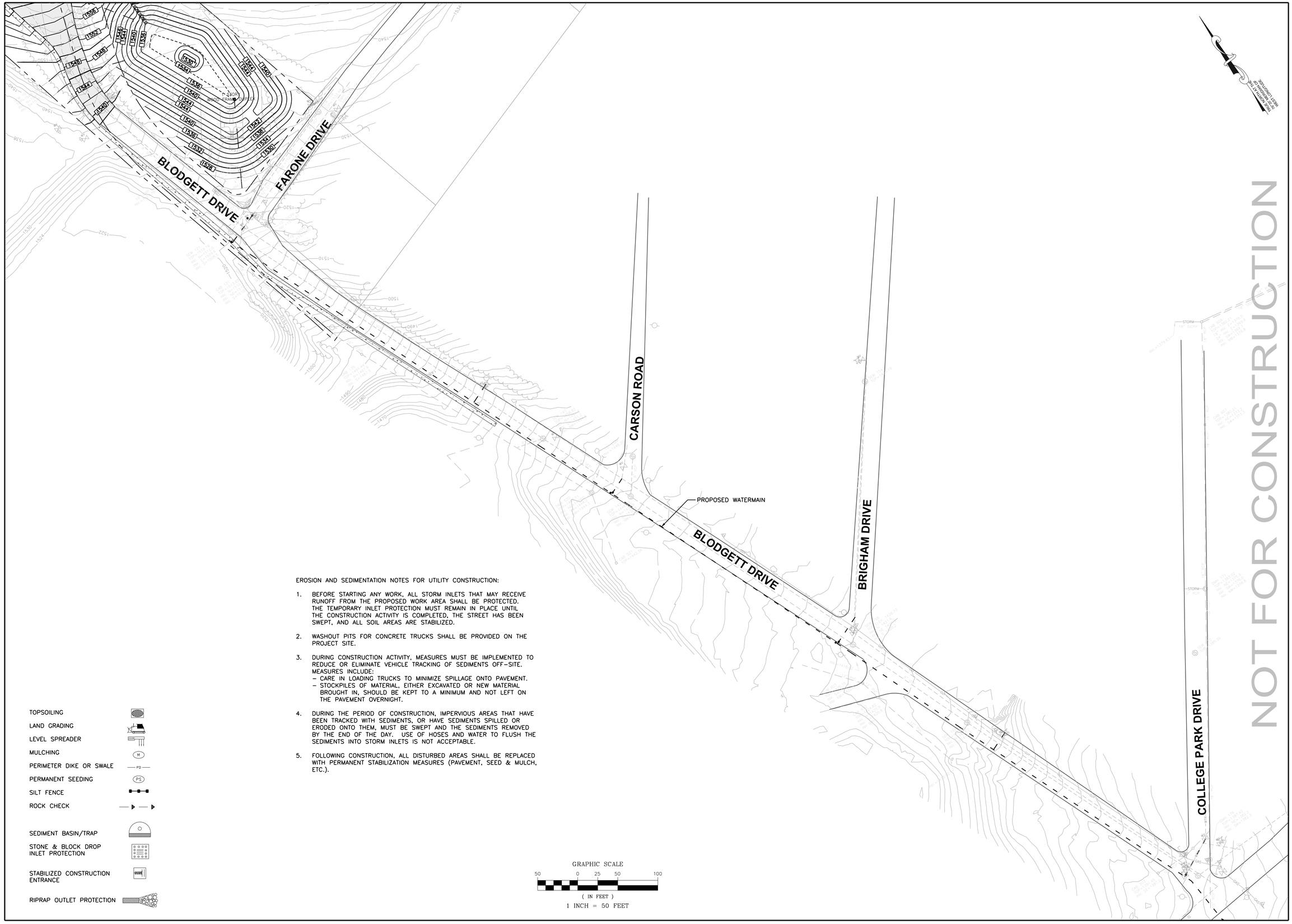
EROSION & SEDIMENT CONTROL PLAN

SHEET NO. **C110**

PROJECT NO. 200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN



EROSION AND SEDIMENTATION NOTES FOR UTILITY CONSTRUCTION:

1. BEFORE STARTING ANY WORK, ALL STORM INLETS THAT MAY RECEIVE RUNOFF FROM THE PROPOSED WORK AREA SHALL BE PROTECTED. THE TEMPORARY INLET PROTECTION MUST REMAIN IN PLACE UNTIL THE CONSTRUCTION ACTIVITY IS COMPLETED, THE STREET HAS BEEN SWEPT, AND ALL SOIL AREAS ARE STABILIZED.

2. WASHOUT PITS FOR CONCRETE TRUCKS SHALL BE PROVIDED ON THE PROJECT SITE.

3. DURING CONSTRUCTION ACTIVITY, MEASURES MUST BE IMPLEMENTED TO REDUCE OR ELIMINATE VEHICLE TRACKING OF SEDIMENTS OFF-SITE. MEASURES INCLUDE:
   - CARE IN LOADING TRUCKS TO MINIMIZE SPILLAGE ONTO PAVEMENT.
   - STOCKPILES OF MATERIAL, EITHER EXCAVATED OR NEW MATERIAL BROUGHT IN, SHOULD BE KEPT TO A MINIMUM AND NOT LEFT ON THE PAVEMENT OVERNIGHT.

4. DURING THE PERIOD OF CONSTRUCTION, IMPERVIOUS AREAS THAT HAVE BEEN TRACKED WITH SEDIMENTS, OR HAVE SEDIMENTS SPILLED OR ERODED ONTO THEM, MUST BE SWEPT AND THE SEDIMENTS REMOVED BY THE END OF THE DAY. USE OF HOSES AND WATER TO FLUSH THE SEDIMENTS INTO STORM INLETS IS NOT ACCEPTABLE.

5. FOLLOWING CONSTRUCTION, ALL DISTURBED AREAS SHALL BE REPLACED WITH PERMANENT STABILIZATION MEASURES (PAVEMENT, SEED & MULCH, ETC.).

TOPSOILING	▨
LAND GRADING	
LEVEL SPREADER	
MULCHING	M
PERIMETER DIKE OR SWALE	— PD —
PERMANENT SEEDING	PS
SILT FENCE	■—■—■
ROCK CHECK	— ▶ — ▶
SEDIMENT BASIN/TRAP	
STONE & BLOCK DROP INLET PROTECTION	
STABILIZED CONSTRUCTION ENTRANCE	
RIPRAP OUTLET PROTECTION	

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NO.	REVISIONS AND DESCRIPTIONS	DATE:
3	RE-SUBMITTAL PACKAGE	4/26/13
2	REV. 3/26/13 CITY LETTER	4/12/13
1	REVISED TO PRELIMINARY PLAN	2/20/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA
OTSEGO COUNTY, NY

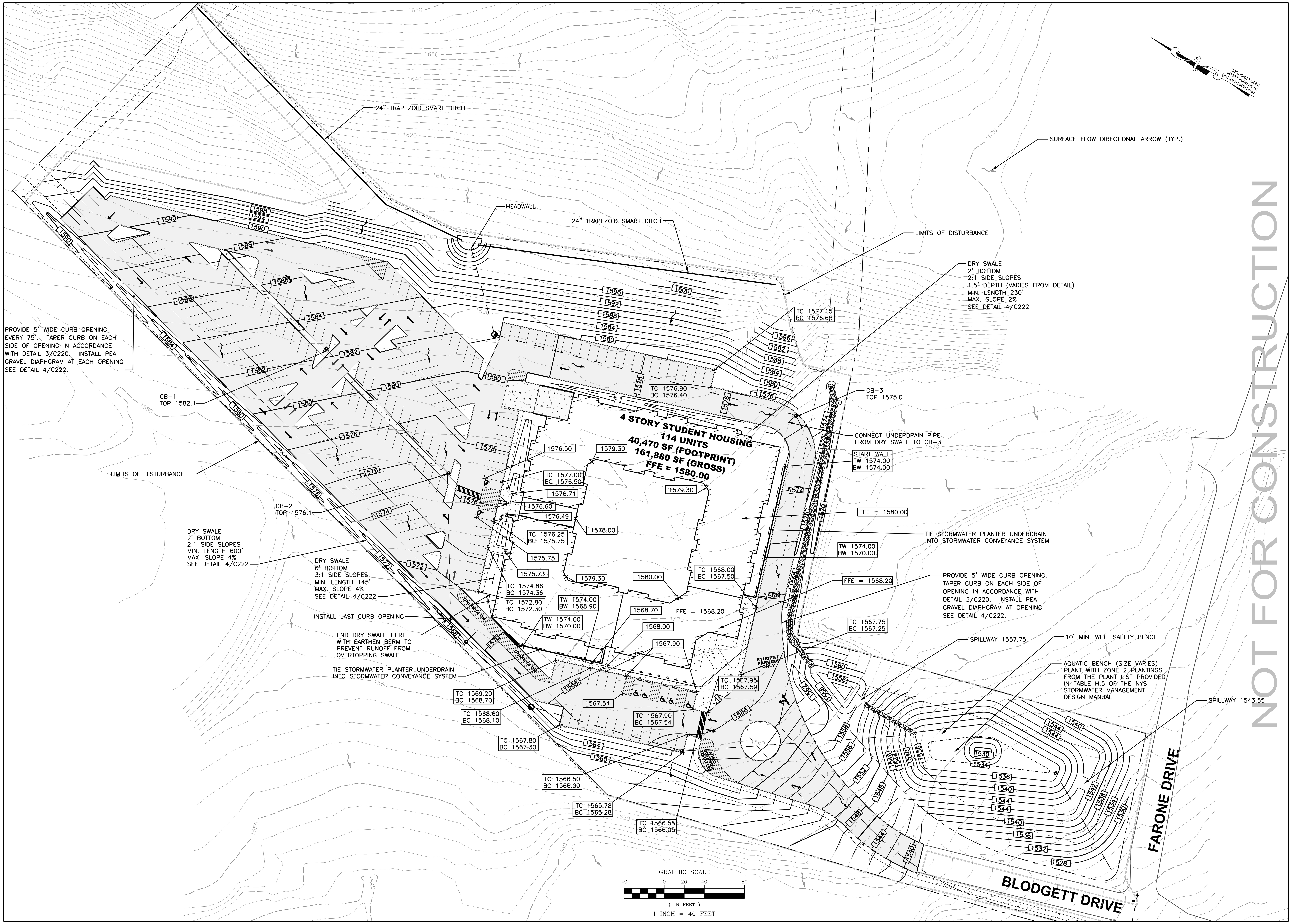
EROSION & SEDIMENT CONTROL PLAN

SHEET NO.
C111

PROJECT NO.
200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN


24" TRAPEZOID SMART DITCH
HEADWALL
24" TRAPEZOID SMART DITCH
LIMITS OF DISTURBANCE
SURFACE FLOW DIRECTIONAL ARROW (TYP.)
DRY SWALE
2' BOTTOM
2:1 SIDE SLOPES
1.5' DEPTH (VARIES FROM DETAIL)
MIN. LENGTH 230'
MAX. SLOPE 2%
SEE DETAIL 4/C222
PROVIDE 5' WIDE CURB OPENING EVERY 75'. TAPER CURB ON EACH SIDE OF OPENING IN ACCORDANCE WITH DETAIL 3/C220. INSTALL PEA GRAVEL DIAPHGRAM AT EACH OPENING SEE DETAIL 4/C222.
CB-1
TOP 1582.1
4 STORY STUDENT HOUSING
114 UNITS
40,470 SF (FOOTPRINT)
161,880 SF (GROSS)
FFE = 1580.00
CB-3
TOP 1575.0
CONNECT UNDERDRAIN PIPE FROM DRY SWALE TO CB-3
START WALL
TW 1574.00
BW 1574.00
LIMITS OF DISTURBANCE
CB-2
TOP 1576.1
FFE = 1580.00
TIE STORMWATER PLANTER UNDERDRAIN INTO STORMWATER CONVEYANCE SYSTEM
TW 1574.00
BW 1570.00
DRY SWALE
2' BOTTOM
2:1 SIDE SLOPES
MIN. LENGTH 600'
MAX. SLOPE 4%
SEE DETAIL 4/C222
DRY SWALE
6' BOTTOM
3:1 SIDE SLOPES
MIN. LENGTH 145'
MAX. SLOPE 4%
SEE DETAIL 4/C222
FFE = 1568.20
PROVIDE 5' WIDE CURB OPENING. TAPER CURB ON EACH SIDE OF OPENING IN ACCORDANCE WITH DETAIL 3/C220. INSTALL PEA GRAVEL DIAPHGRAM AT OPENING SEE DETAIL 4/C222.
INSTALL LAST CURB OPENING
FFE = 1568.20
END DRY SWALE HERE WITH EARTHEN BERM TO PREVENT RUNOFF FROM OVERTOPPING SWALE
TIE STORMWATER PLANTER UNDERDRAIN INTO STORMWATER CONVEYANCE SYSTEM
SPILLWAY 1557.75
10' MIN. WIDE SAFETY BENCH
AQUATIC BENCH (SIZE VARIES) PLANT WITH ZONE 2 PLANTINGS FROM THE PLANT LIST PROVIDED IN TABLE H.5 OF THE NYS STORMWATER MANAGEMENT DESIGN MANUAL
SPILLWAY 1543.55
STUDENT PARKING ONLY
NO PARKING
FARONE DRIVE
BLODGETT DRIVE
TC 1577.15
BC 1576.65
TC 1576.90
BC 1576.40
1576.50
1579.30
TC 1577.00
BC 1576.50
1576.71
1579.30
1576.60
1576.49
1578.00
TC 1576.25
BC 1575.75
1575.75
1575.73
1579.30
1580.00
TC 1568.00
BC 1567.50
TC 1574.86
BC 1574.36
TC 1572.80
BC 1572.30
TW 1574.00
BW 1568.90
1568.70
TW 1574.00
BW 1570.00
1568.00
1567.90
TC 1567.75
BC 1567.25
TC 1567.95
BC 1567.59
TC 1569.20
BC 1568.70
TC 1568.60
BC 1568.10
1567.54
TC 1567.90
BC 1567.54
TC 1567.80
BC 1567.30
TC 1566.50
BC 1566.00
TC 1565.78
BC 1565.28
TC 1566.55
BC 1566.05
GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 INCH = 40 FEET

NOT FOR CONSTRUCTION

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

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NO.	REVISIONS AND DESCRIPTIONS	DATE
1	REVISED TO PRELIMINARY PLAN	2/20/13
2	REV. 3/26/13 CITY LETTER	4/2/13
3	RE-SUBMITTAL PACKAGE	4/26/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA — OTSEGO COUNTY, NY

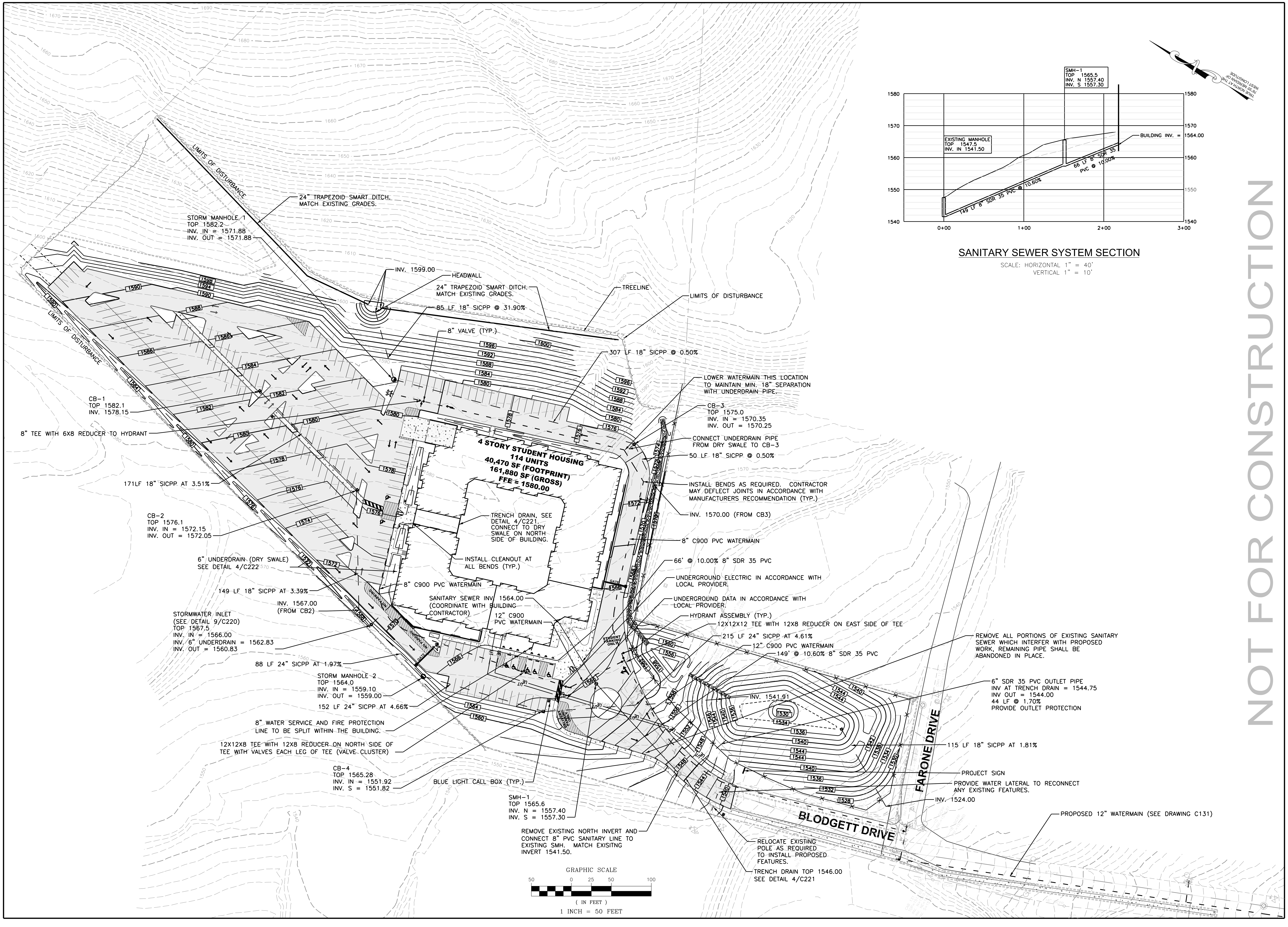
GRADING PLAN

SHEET NO. C120

PROJECT NO. 200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN



LIMITS OF DISTURBANCE
24" TRAPEZOID SMART DITCH. MATCH EXISTING GRADES.
STORM MANHOLE 1
TOP 1582.2
INV. IN = 1571.88
INV. OUT = 1571.88
INV. 1599.00
HEADWALL
24" TRAPEZOID SMART DITCH. MATCH EXISTING GRADES.
85 LF 18" SICPP @ 31.90%
TREELINE
LIMITS OF DISTURBANCE
8" VALVE (TYP.)
307 LF 18" SICPP @ 0.50%
LOWER WATERMAIN THIS LOCATION TO MAINTAIN MIN. 18" SEPARATION WITH UNDERDRAIN PIPE.
CB-3
TOP 1575.0
INV. IN = 1570.35
INV. OUT = 1570.25
CONNECT UNDERDRAIN PIPE FROM DRY SWALE TO CB-3
50 LF 18" SICPP @ 0.50%
INSTALL BENDS AS REQUIRED. CONTRACTOR MAY DEFLECT JOINTS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATION (TYP.)
INV. 1570.00 (FROM CB3)
8" C900 PVC WATERMAIN
66' @ 10.00% 8" SDR 35 PVC
UNDERGROUND ELECTRIC IN ACCORDANCE WITH LOCAL PROVIDER.
UNDERGROUND DATA IN ACCORDANCE WITH LOCAL PROVIDER.
HYDRANT ASSEMBLY (TYP.)
12X12X12 TEE WITH 12X8 REDUCER ON EAST SIDE OF TEE
215 LF 24" SICPP AT 4.61%
12" C900 PVC WATERMAIN
149' @ 10.60% 8" SDR 35 PVC
CB-1
TOP 1582.1
INV. 1578.15
8" TEE WITH 6X8 REDUCER TO HYDRANT
4 STORY STUDENT HOUSING
114 UNITS
40,470 SF (FOOTPRINT)
161,880 SF (GROSS)
FFE = 1580.00
171LF 18" SICPP AT 3.51%
TRENCH DRAIN, SEE DETAIL 4/C221. CONNECT TO DRY SWALE ON NORTH SIDE OF BUILDING.
CB-2
TOP 1576.1
INV. IN = 1572.15
INV. OUT = 1572.05
INSTALL CLEANOUT AT ALL BENDS (TYP.)
6" UNDERDRAIN (DRY SWALE) SEE DETAIL 4/C222
8" C900 PVC WATERMAIN
149 LF 18" SICPP AT 3.39%
SANITARY SEWER INV. 1564.00 (COORDINATE WITH BUILDING CONTRACTOR)
INV. 1567.00 (FROM CB2)
12" C900 PVC WATERMAIN
STORMWATER INLET (SEE DETAIL 9/C220)
TOP 1567.5
INV. IN = 1566.00
INV. 6" UNDERDRAIN = 1562.83
INV. OUT = 1560.83
88 LF 24" SICPP AT 1.97%
STORM MANHOLE 2
TOP 1564.0
INV. IN = 1559.10
INV. OUT = 1559.00
152 LF 24" SICPP AT 4.66%
8" WATER SERVICE AND FIRE PROTECTION LINE TO BE SPLIT WITHIN THE BUILDING.
12X12X8 TEE WITH 12X8 REDUCER ON NORTH SIDE OF TEE WITH VALVES EACH LEG OF TEE (VALVE CLUSTER)
CB-4
TOP 1565.28
INV. IN = 1551.92
INV. S = 1551.82
BLUE LIGHT CALL BOX (TYP.)
SMH-1
TOP 1565.6
INV. N = 1557.40
INV. S = 1557.30
REMOVE EXISTING NORTH INVERT AND CONNECT 8" PVC SANITARY LINE TO EXISTING SMH. MATCH EXISITNG INVERT 1541.50.
INV. 1541.91
REMOVE ALL PORTIONS OF EXISTING SANITARY SEWER WHICH INTERFER WITH PROPOSED WORK, REMAINING PIPE SHALL BE ABANDONED IN PLACE.
6" SDR 35 PVC OUTLET PIPE
INV AT TRENCH DRAIN = 1544.75
INV OUT = 1544.00
44 LF @ 1.70%
PROVIDE OUTLET PROTECTION
115 LF 18" SICPP AT 1.81%
PROJECT SIGN
PROVIDE WATER LATERAL TO RECONNECT ANY EXISTING FEATURES.
INV. 1524.00
FARONE DRIVE
BLODGETT DRIVE
PROPOSED 12" WATERMAIN (SEE DRAWING C131)
RELOCATE EXISTING POLE AS REQUIRED TO INSTALL PROPOSED FEATURES.
TRENCH DRAIN TOP 1546.00 SEE DETAIL 4/C221
GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 INCH = 50 FEET
SMH-1
TOP 1565.5
INV. N 1557.40
INV. S 1557.30
EXISTING MANHOLE
TOP 1547.5
INV. IN 1541.50
BUILDING INV. = 1564.00
66 LF 8" SDR 35 PVC @ 10.00%
149 LF 8" SDR 35 PVC @ 10.60%
1580
1570
1560
1550
1540
0+00
1+00
2+00
3+00

SANITARY SEWER SYSTEM SECTION

SCALE: HORIZONTAL 1" = 40'
VERTICAL 1" = 10'

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NO.	REVISIONS AND DESCRIPTIONS	DATE:
3	RE-SUBMITTAL PACKAGE	4/26/13
2	REV. 3/26/13 CITY LETTER	4/12/13
1	REVISED TO PRELIMINARY PLAN	2/20/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA OTSEGO COUNTY, NY

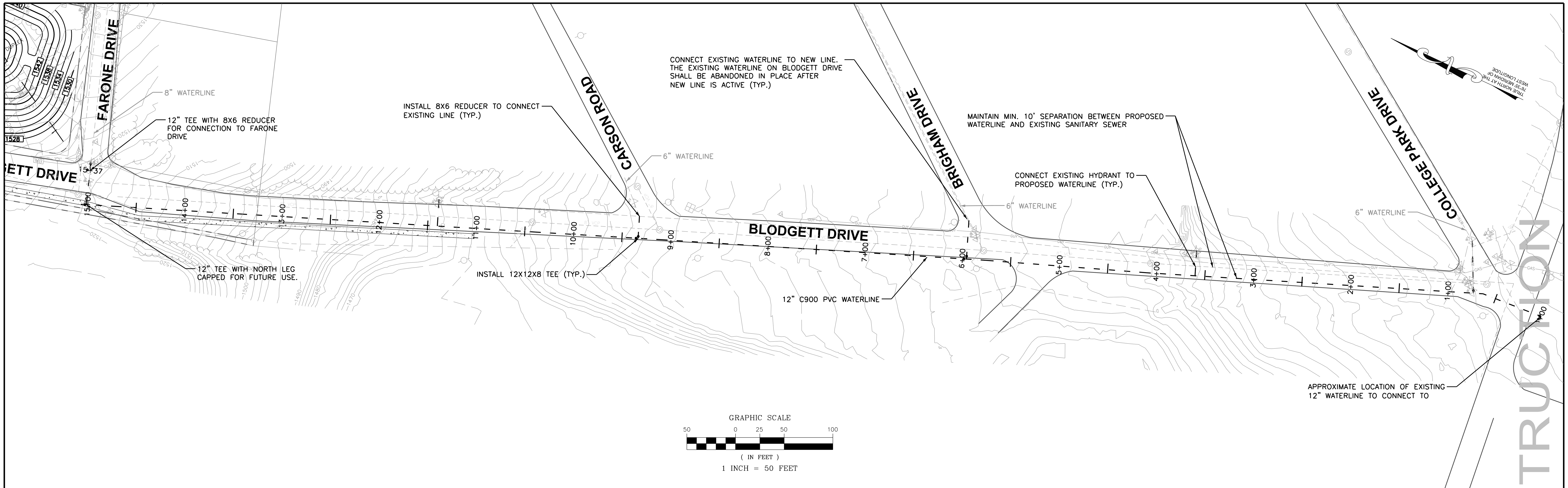
UTILITY PLAN

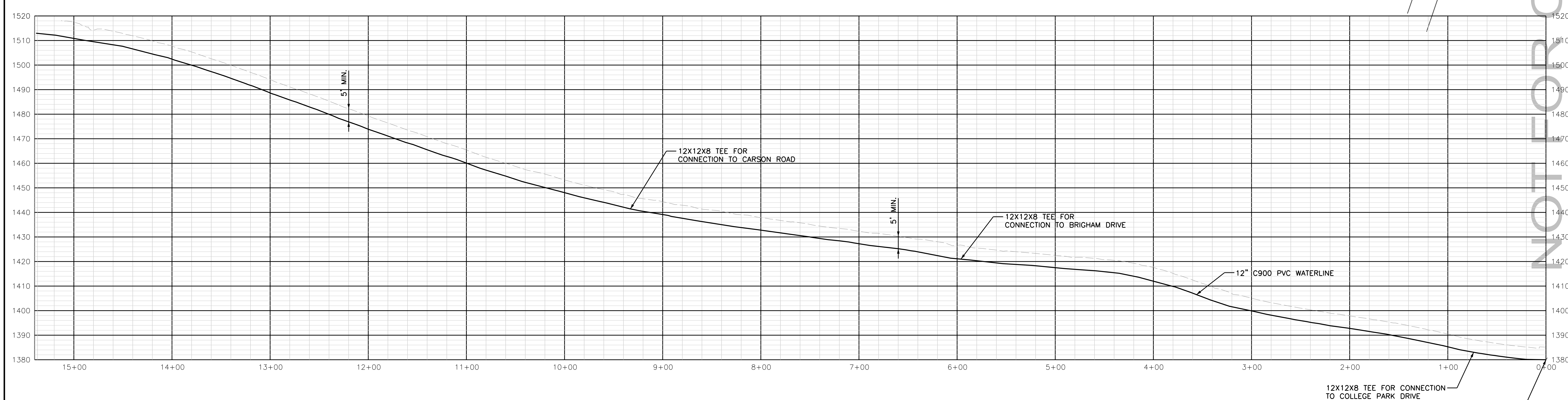
SHEET NO.
C130

PROJECT NO.
200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN





OFFSITE WATERLINE PROFILE

SCALE: HORIZONTAL 1" = 50'
VERTICAL 1" = 20'

NOT FOR CONSTRUCTION

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HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA
OTSEGO COUNTY, NY

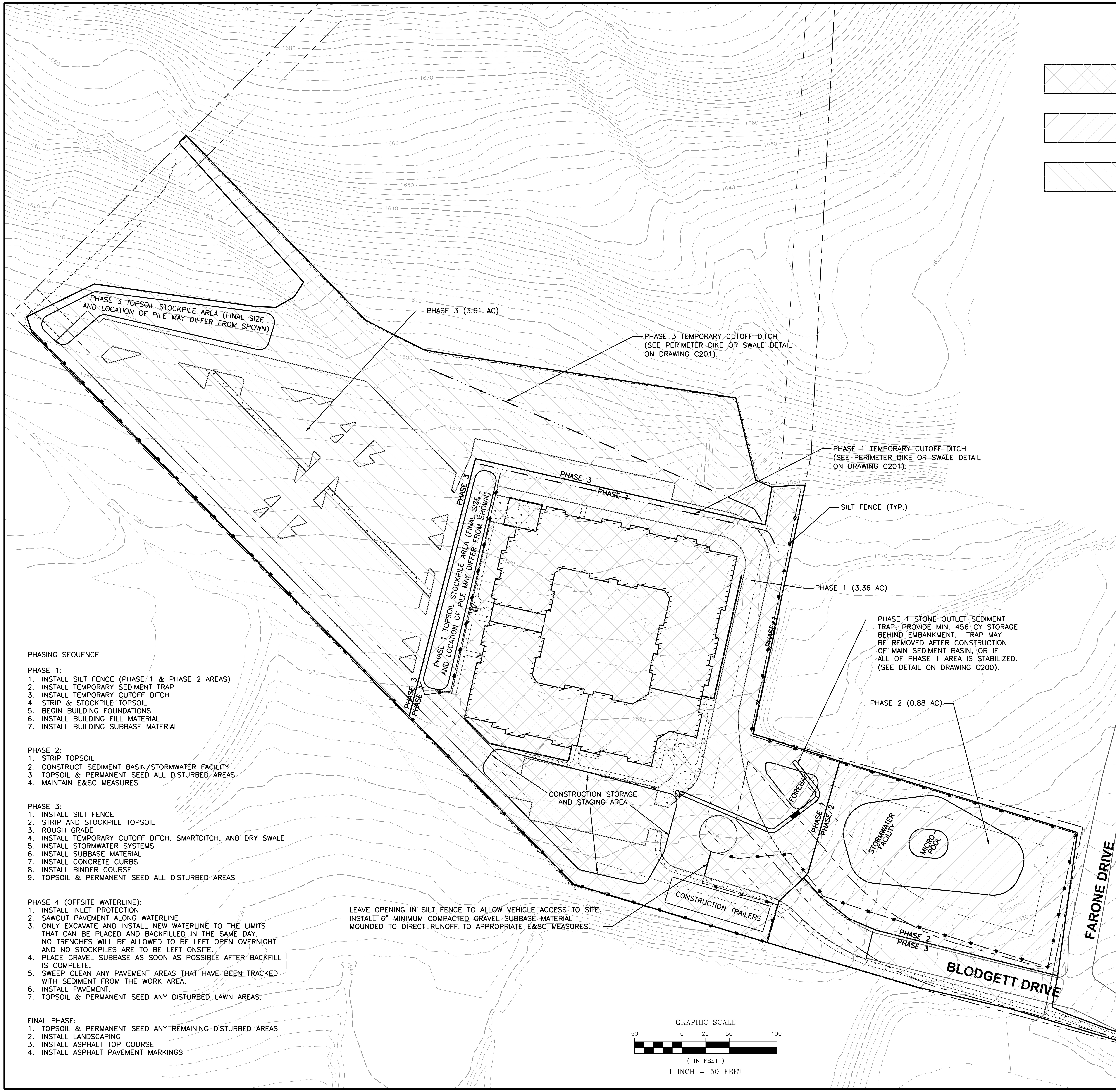
OFFSITE WATERLINE PLAN & PROFILE

SHEET NO.
C131

PROJECT NO.
200.26412

DATE: 02/20/13

CAD FILE NO: 20026412_SITE.DGN



PHASING SEQUENCE

PHASE 1:
1. INSTALL SILT FENCE (PHASE 1 & PHASE 2 AREAS)
2. INSTALL TEMPORARY SEDIMENT TRAP
3. INSTALL TEMPORARY CUTOFF DITCH
4. STRIP & STOCKPILE TOPSOIL
5. BEGIN BUILDING FOUNDATIONS
6. INSTALL BUILDING FILL MATERIAL
7. INSTALL BUILDING SUBBASE MATERIAL

PHASE 2:
1. STRIP TOPSOIL
2. CONSTRUCT SEDIMENT BASIN/STORMWATER FACILITY
3. TOPSOIL & PERMANENT SEED ALL DISTURBED AREAS
4. MAINTAIN E&SC MEASURES

PHASE 3:
1. INSTALL SILT FENCE
2. STRIP AND STOCKPILE TOPSOIL
3. ROUGH GRADE
4. INSTALL TEMPORARY CUTOFF DITCH, SMARTDITCH, AND DRY SWALE
5. INSTALL STORMWATER SYSTEMS
6. INSTALL SUBBASE MATERIAL
7. INSTALL CONCRETE CURBS
8. INSTALL BINDER COURSE
9. TOPSOIL & PERMANENT SEED ALL DISTURBED AREAS

PHASE 4 (OFFSITE WATERLINE):
1. INSTALL INLET PROTECTION
2. SAWCUT PAVEMENT ALONG WATERLINE
3. ONLY EXCAVATE AND INSTALL NEW WATERLINE TO THE LIMITS THAT CAN BE PLACED AND BACKFILLED IN THE SAME DAY. NO TRENCHES WILL BE ALLOWED TO BE LEFT OPEN OVERNIGHT AND NO STOCKPILES ARE TO BE LEFT ONSITE.
4. PLACE GRAVEL SUBBASE AS SOON AS POSSIBLE AFTER BACKFILL IS COMPLETE.
5. SWEEP CLEAN ANY PAVEMENT AREAS THAT HAVE BEEN TRACKED WITH SEDIMENT FROM THE WORK AREA.
6. INSTALL PAVEMENT.
7. TOPSOIL & PERMANENT SEED ANY DISTURBED LAWN AREAS.

FINAL PHASE:
1. TOPSOIL & PERMANENT SEED ANY REMAINING DISTURBED AREAS
2. INSTALL LANDSCAPING
3. INSTALL ASPHALT TOP COURSE
4. INSTALL ASPHALT PAVEMENT MARKINGS

NOTE:
1. SEE DRAWING C110 FOR EROSION AND SEDIMENT CONTROL FEATURES WHICH ARE TO BE INSTALLED.
2. THE MAXIMUM AMOUNT OF DISTURBED AREA AT ANY ONE TIME SHALL BE LIMITED TO 5 ACRES. CONTRACTOR SHALL STABILIZE PREVIOUSLY DISTURBED AREAS WITH PROPOSED FINAL COVER MATERIAL (I.E. GRASS, ASPHALT, ROCK, BUILDING, ETC.) BEFORE DISTURBING ADDITIONAL AREA. IF DISTURBED AREA EXCEEDS 5 ACRES, A MINIMUM OF TWO (2) SWPPP INSPECTIONS EACH WEEK WILL BE REQUIRED UNTIL SUCH TIME THAT LIMIT OF DISTURBANCE IS LESS THAN 5 ACRES.
3. FOR THE PURPOSE OF DETERMINING IF AN AREA IS STABILIZED, INSTALLATION OF ASPHALT BINDER COURSE SHALL BE CONSIDERED ADEQUATE COVER FOR STABILIZATION.
4. TOPSOIL STOCKPILES SHALL BE MULCHED AND SILT FENCE INSTALLED AROUND TOE OF PILE(S). FINAL LOCATION AND SIZES OF TOPSOIL STOCKPILES MAY DIFFER FROM THOSE SHOWN HERE.

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2	REV. 3/26/13 CITY LETTER	4/12/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA OTSEGO COUNTY, NY

CONSTRUCTION STAGING PLAN

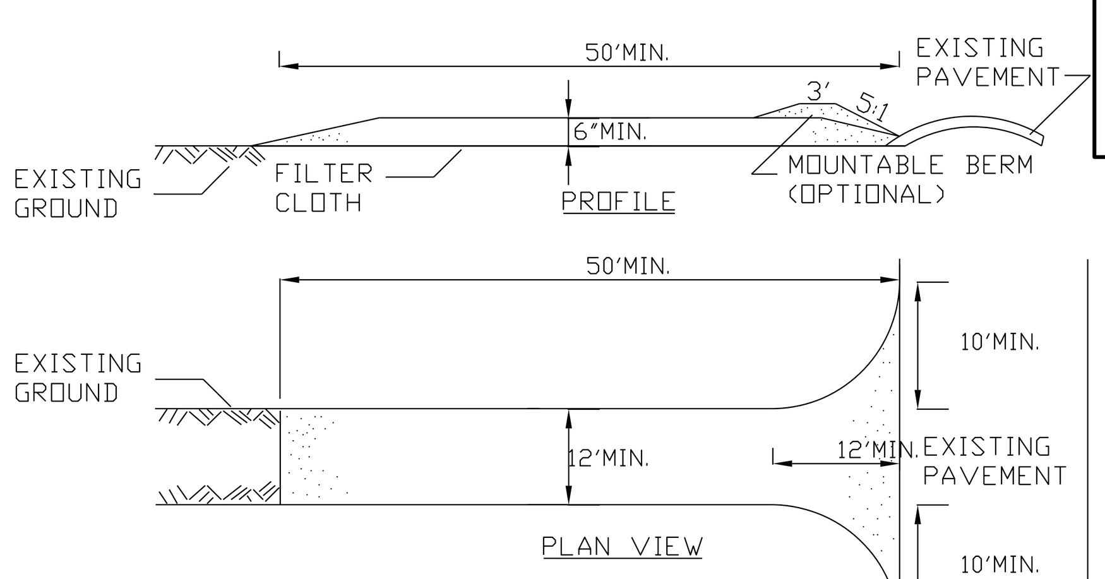
SHEET NO. C140

PROJECT NO. 200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

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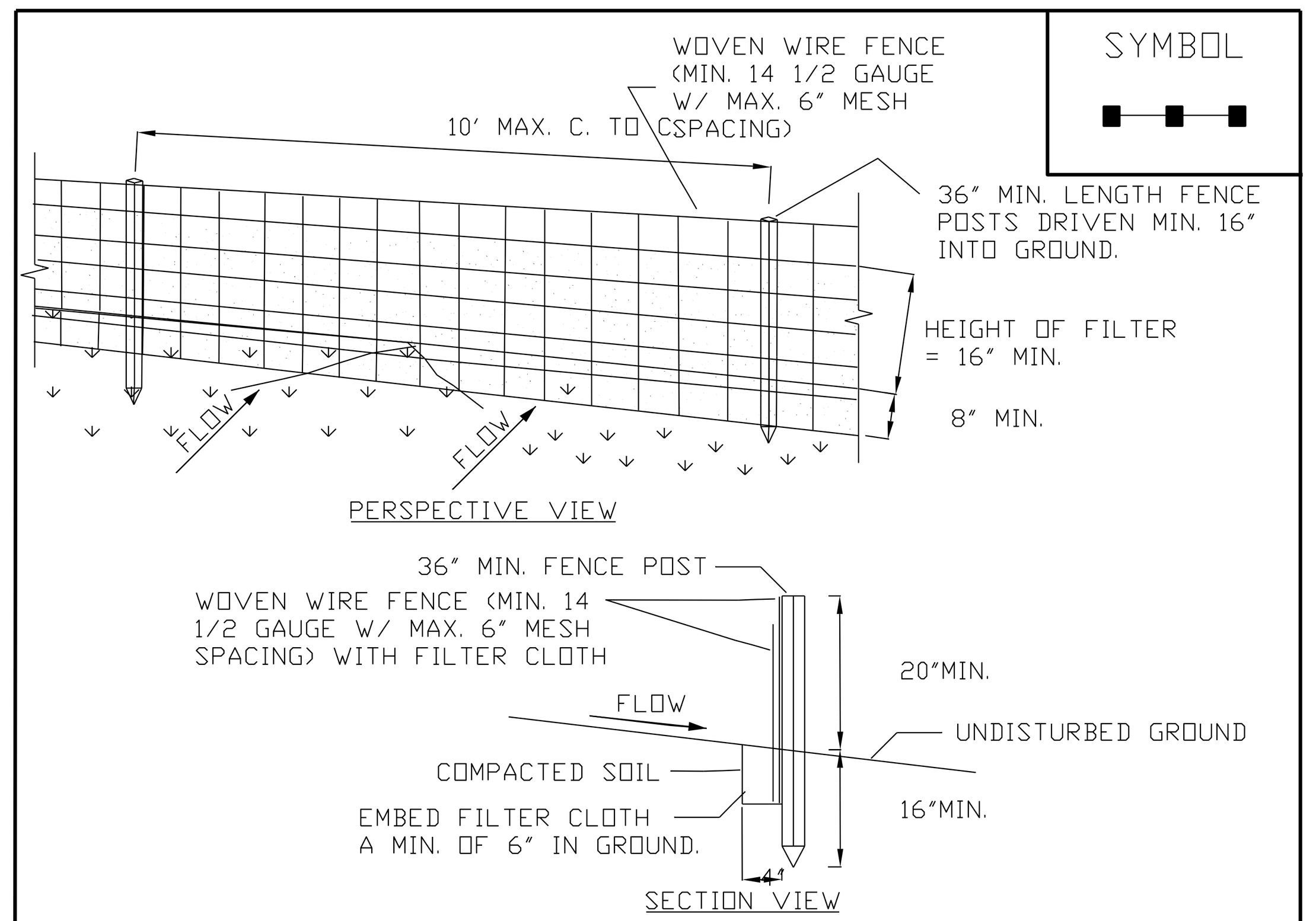
STABILIZED CONSTRUCTION ENTRANCE

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

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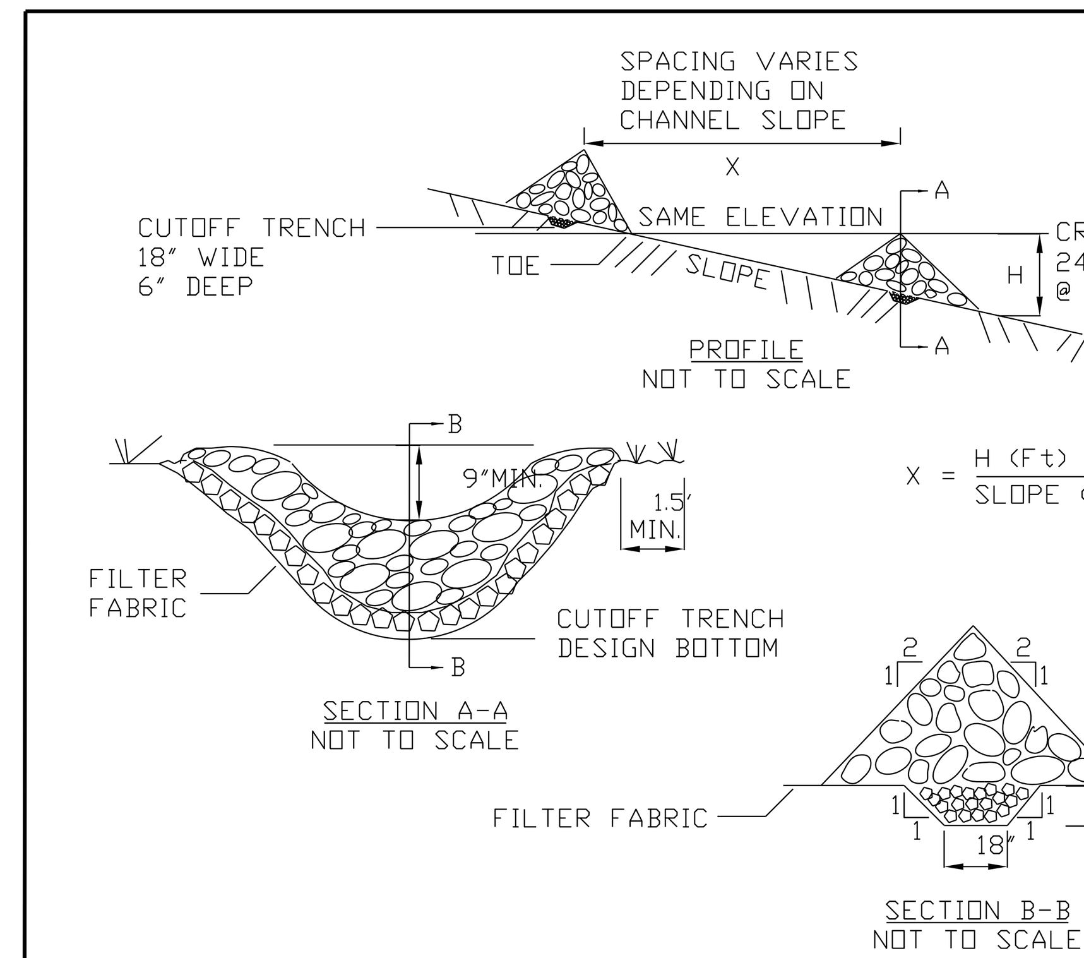
SILT FENCE

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

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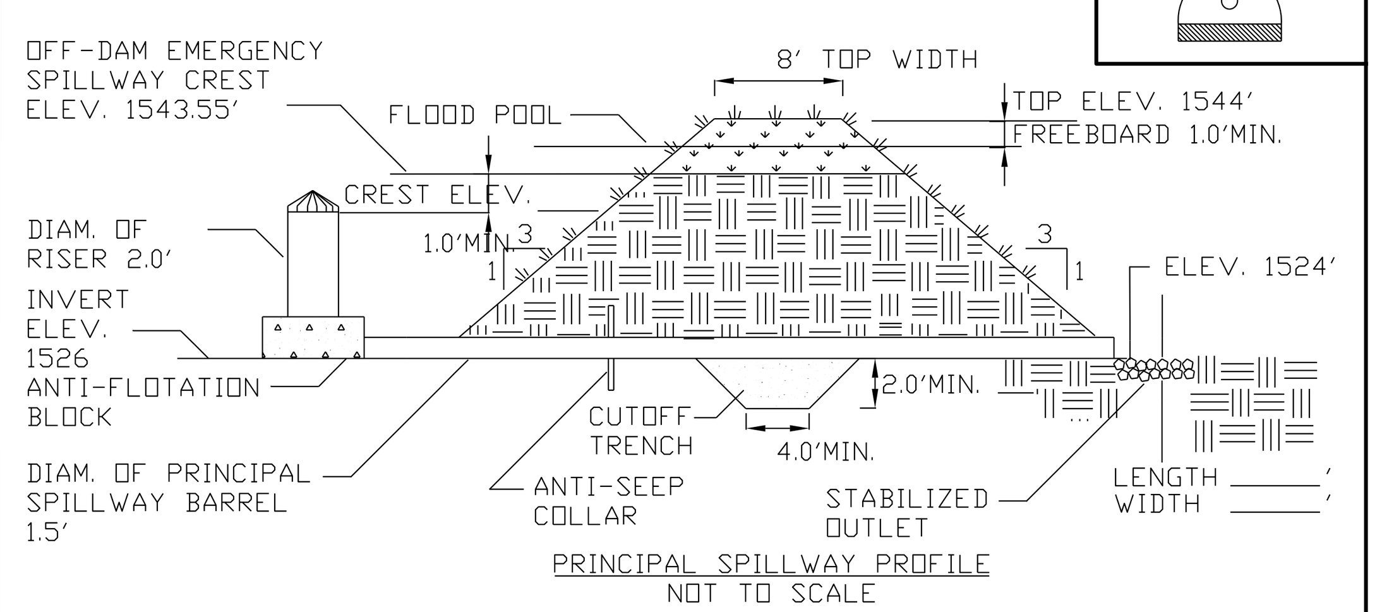
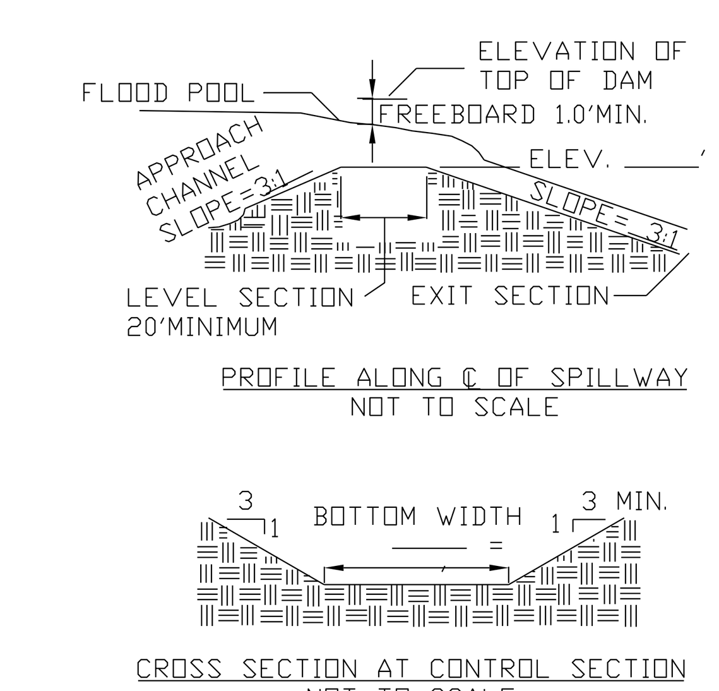
CHECK DAM

SYMBOL



MAXIMUM DRAINAGE AREA = 100 ACRES



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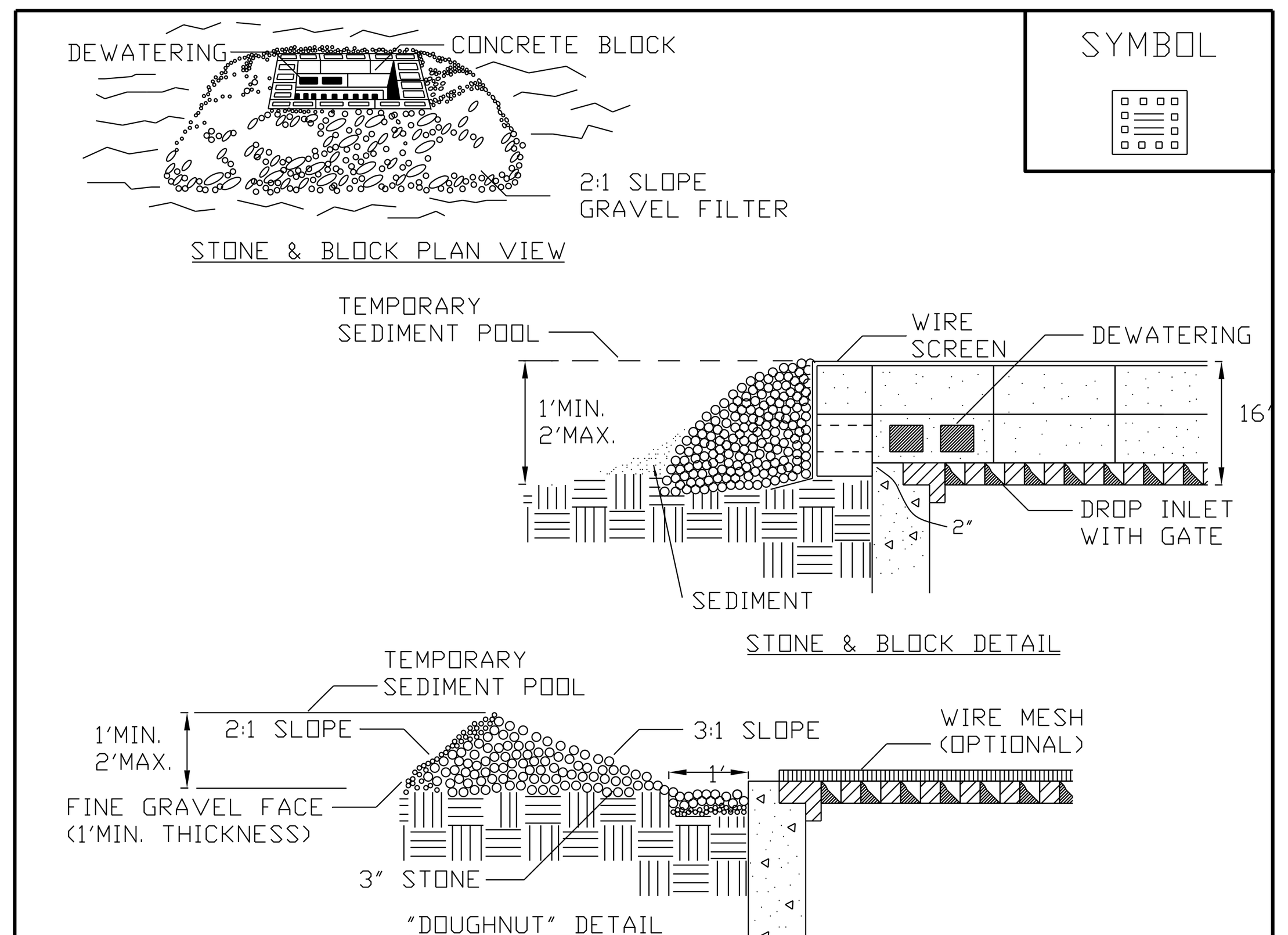
SEDIMENT BASIN DETAILS

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

MAXIMUM DRAINAGE AREA 1 ACRE

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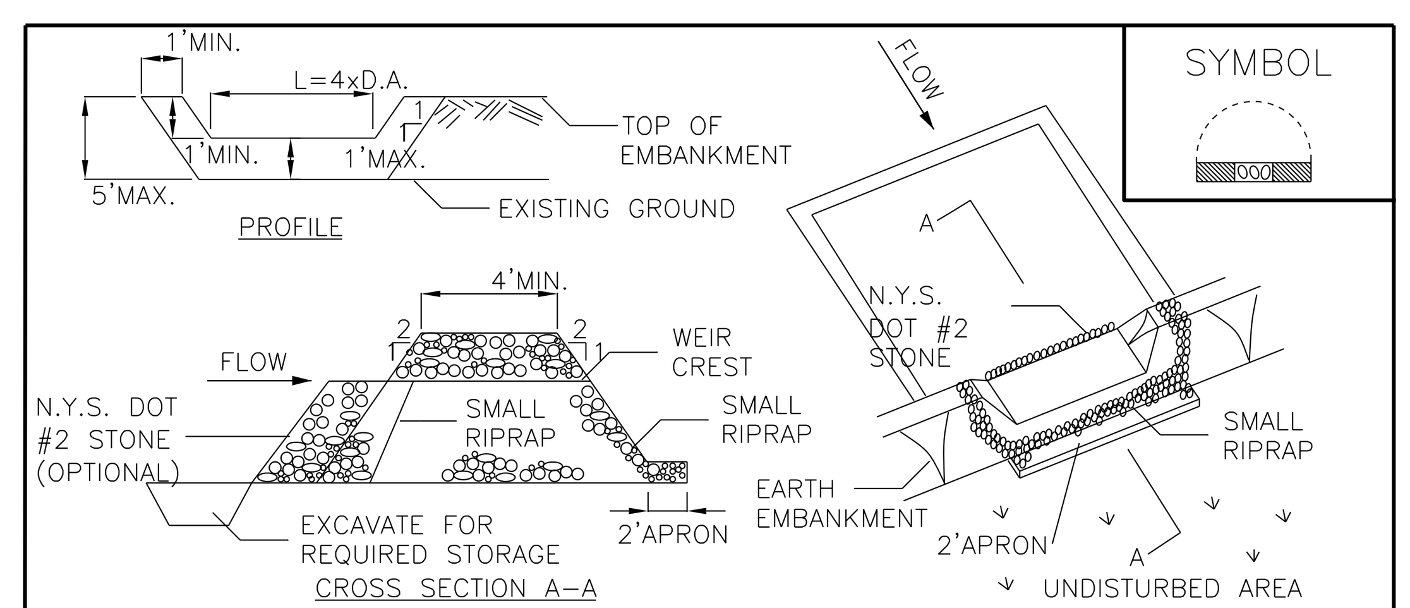
STONE & BLOCK DROP INLET PROTECTION

SYMBOL



OPTION: A ONE FOOT LAYER OF N.Y.S. DOT #2 STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP INPLACE OF THE EMBEDDED FILTER CLOTH.

CONSTRUCTION SPECIFICATIONS

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

MAXIMUM DRAINAGE AREA 5 ACRES

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STONE OUTLET SEDIMENT TRAP ST-IV

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HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA — OTSEGO COUNTY, NY

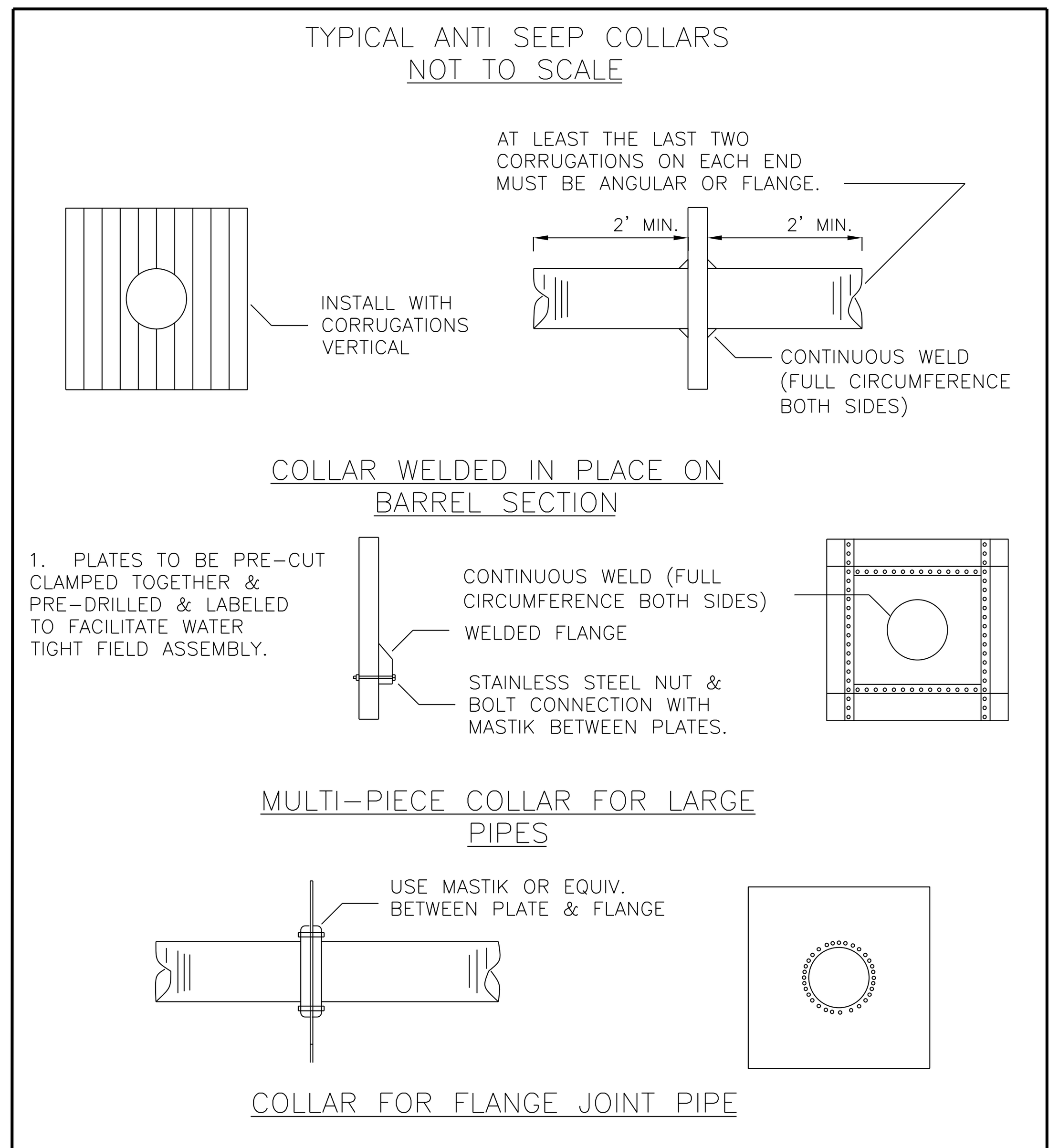
EROSION & SEDIMENT CONTROL DETAILS

SHEET NO. C200

PROJECT NO. 200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN



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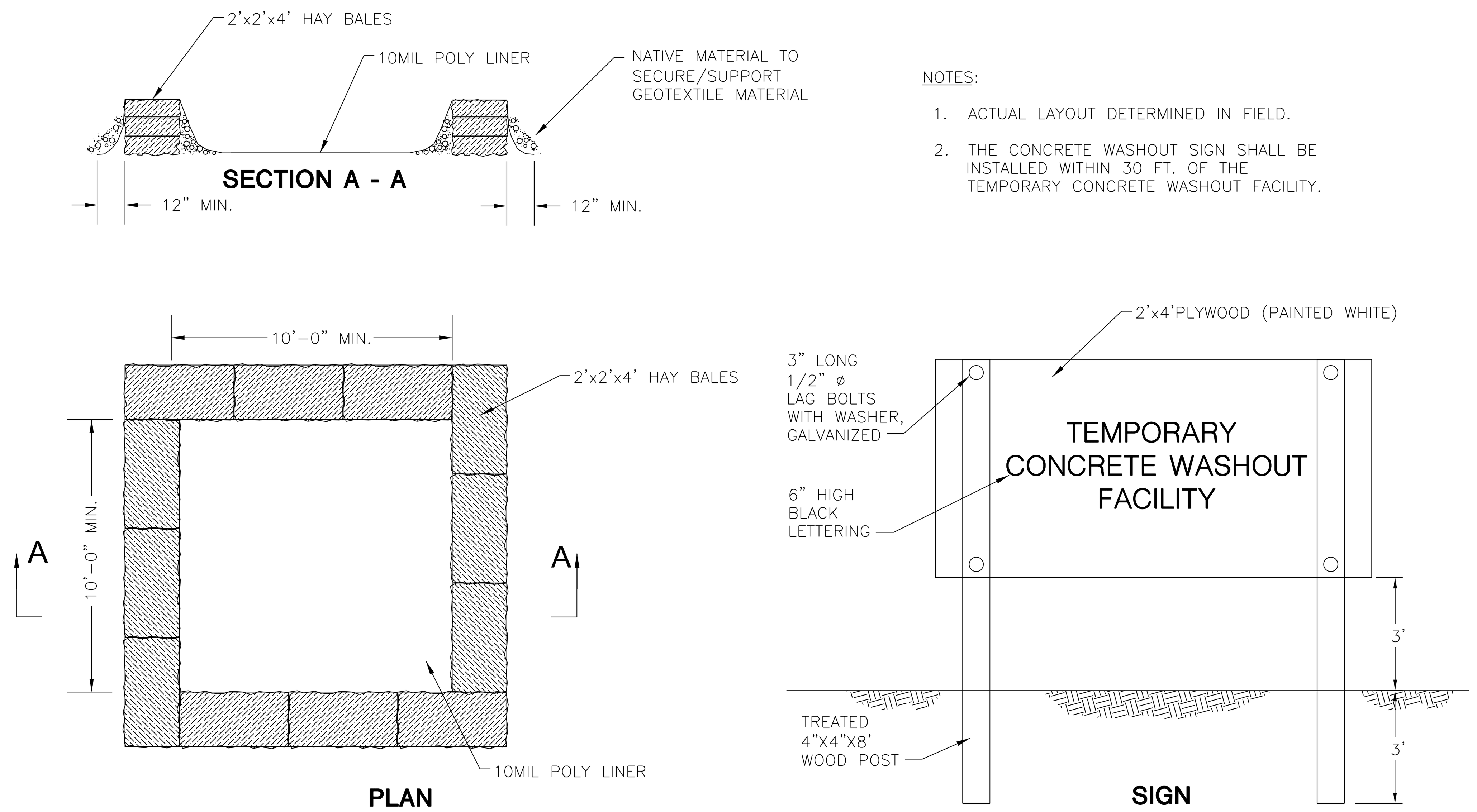


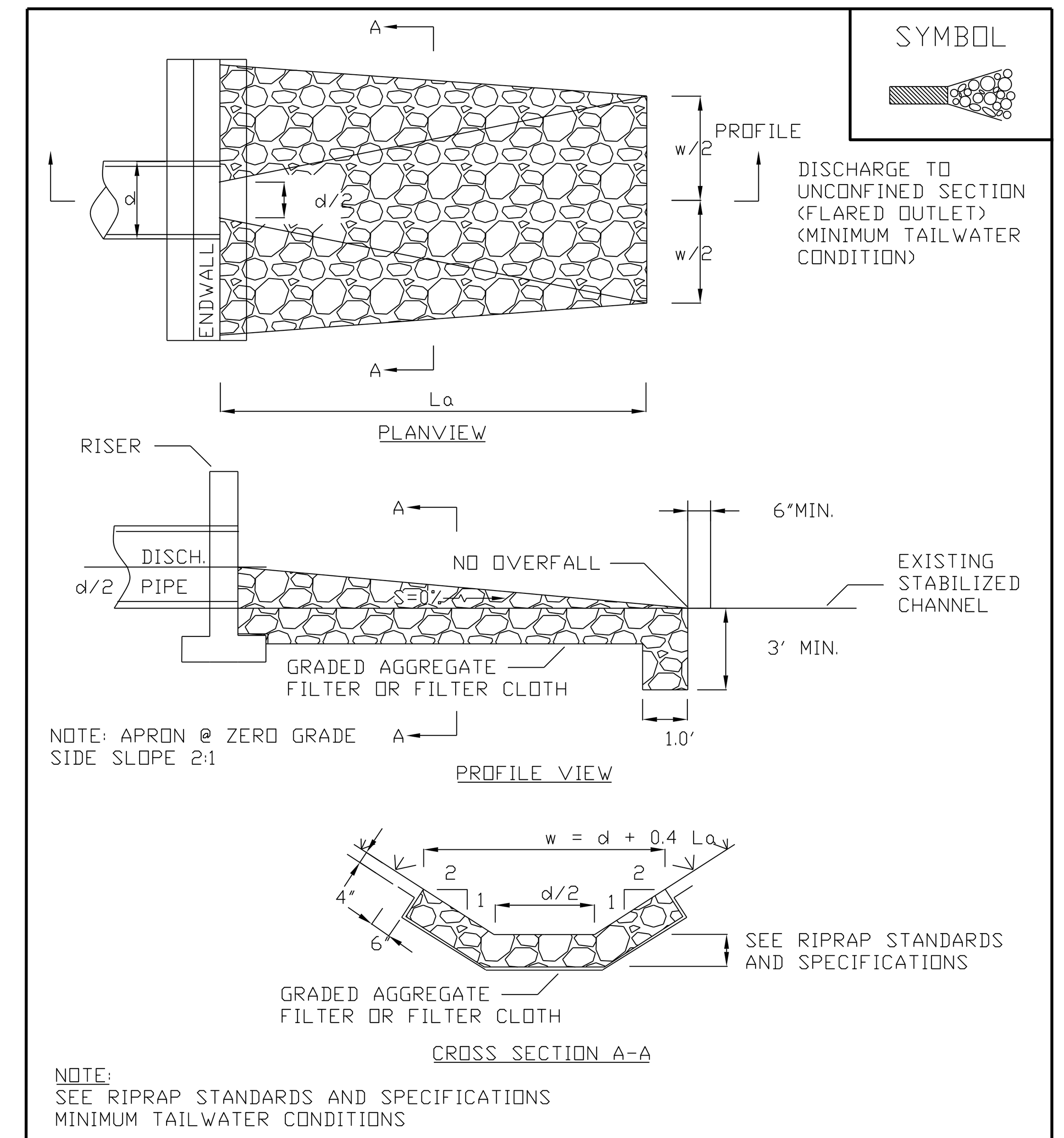
NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

1
C201

TEMPORARY CONCRETE WASHOUT FACILITY

N.T.S.



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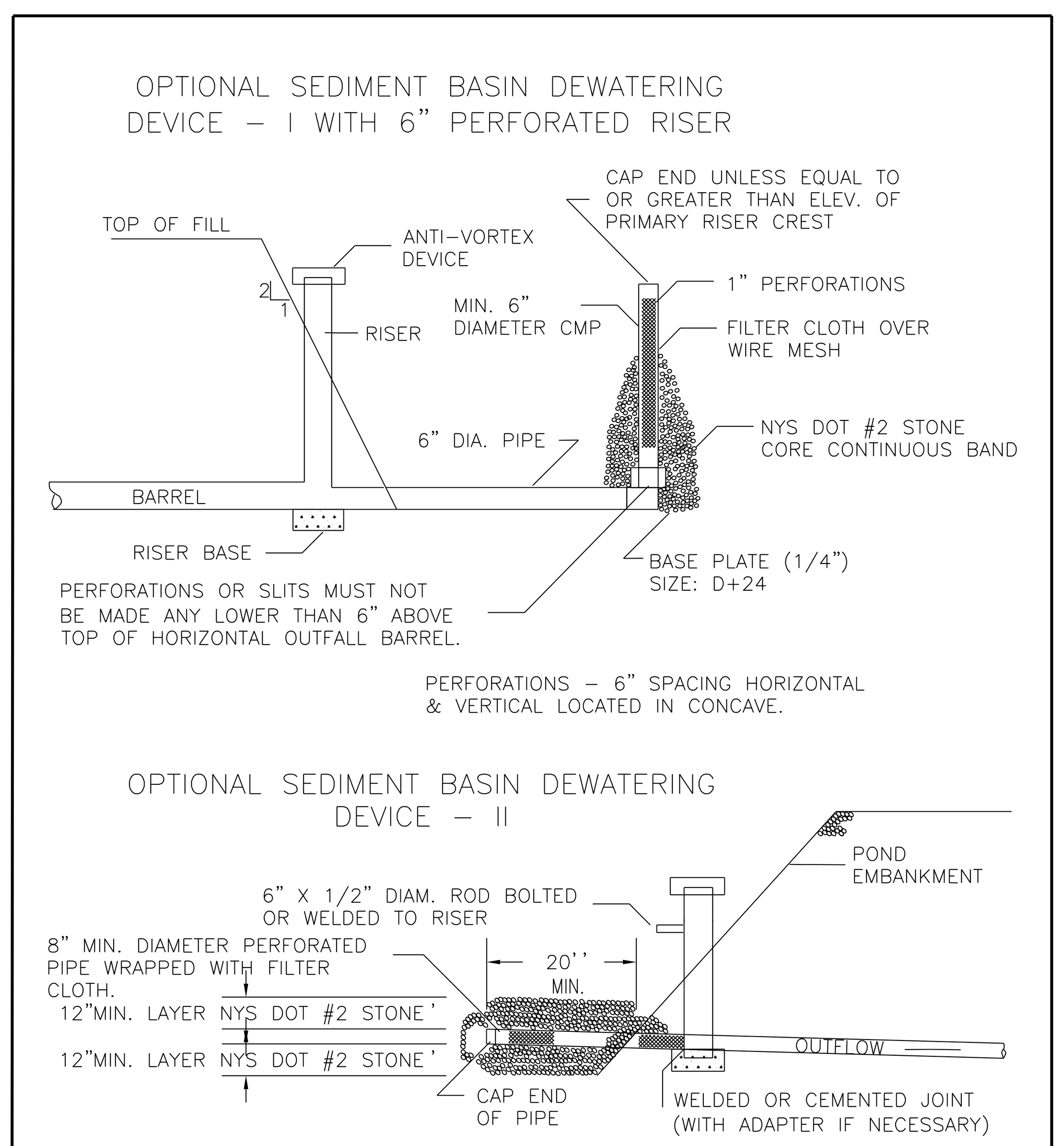
RIPRAP OUTLET PROTECTION EXAMPLE



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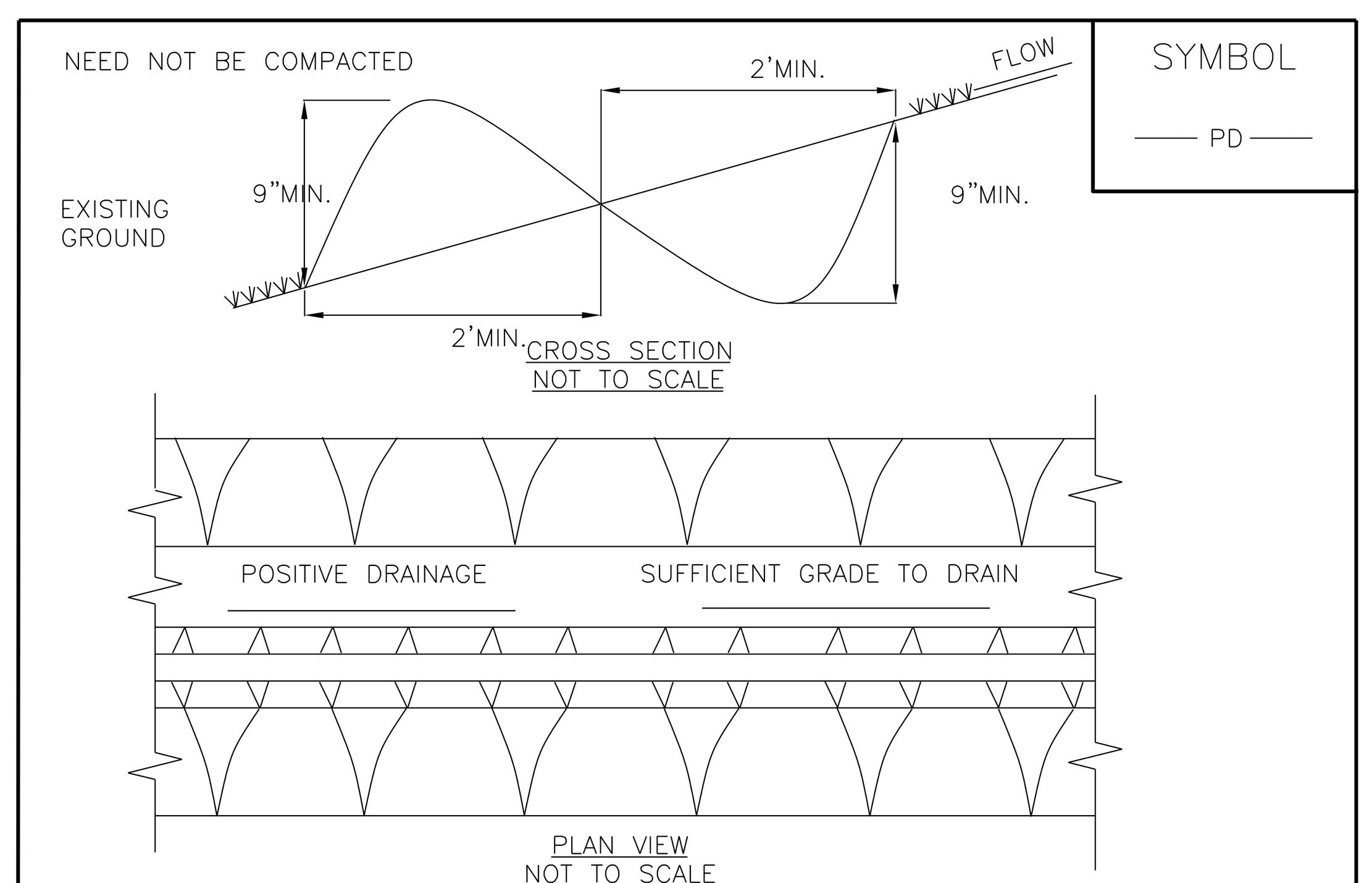
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

OPTIONAL SEDIMENT BASIN DEWATERING DEVICES



CONSTRUCTION SPECIFICATIONS

1. ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSION VELOCITY.
4. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
5. STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR TEMPORARY SEEDING AND MULCHING, AND SHALL BE DONE WITHIN 10 DAYS.
6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

MAX. DRAINAGE AREA LIMIT: 2 ACRES

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

PERIMETER DIKE OR SWALE

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
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Email: info@keyscomp.com
www.keyscomp.com

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

NO.	REVISIONS AND DESCRIPTIONS	DATE
3	REV-SUBMITTAL PACKAGE	4/26/13
2	REV. 3/26/13 CITY LETTER	4/10/13
1	REVISED TO PRELIMINARY PLAN	2/26/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA
OTSEGO COUNTY, NY

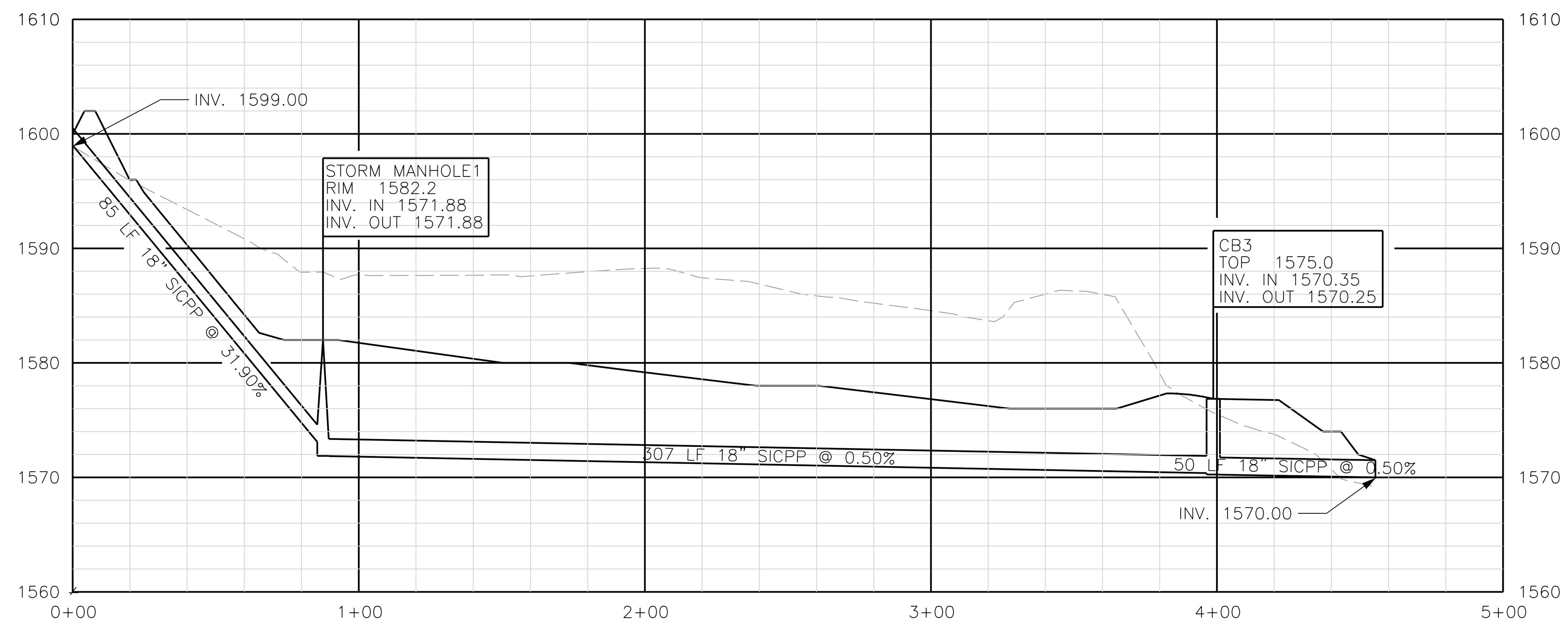
EROSION & SEDIMENT CONTROL DETAILS

SHEET NO.
C201

PROJECT NO.
200.26412

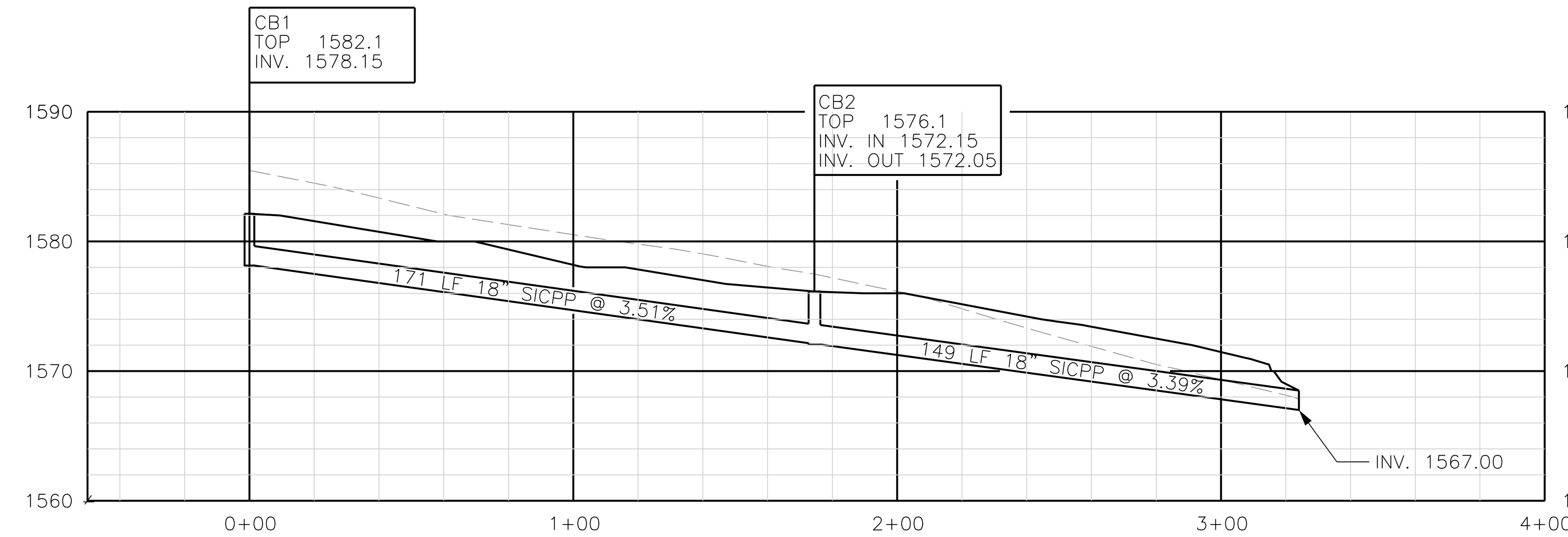
DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN



STORM DRAINAGE SYSTEM SECTION

SCALE: HORIZONTAL 1" = 40'
VERTICAL 1" = 10'



STORM DRAINAGE SYSTEM SECTION

SCALE: HORIZONTAL 1" = 40'
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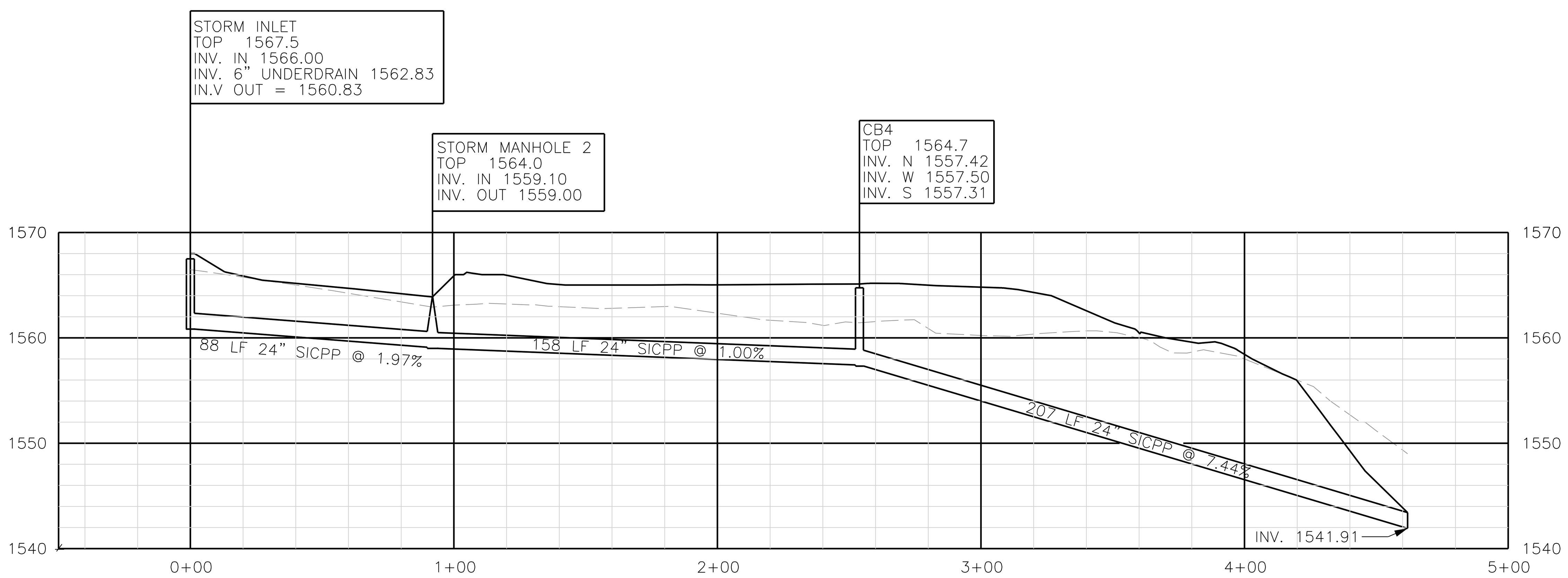
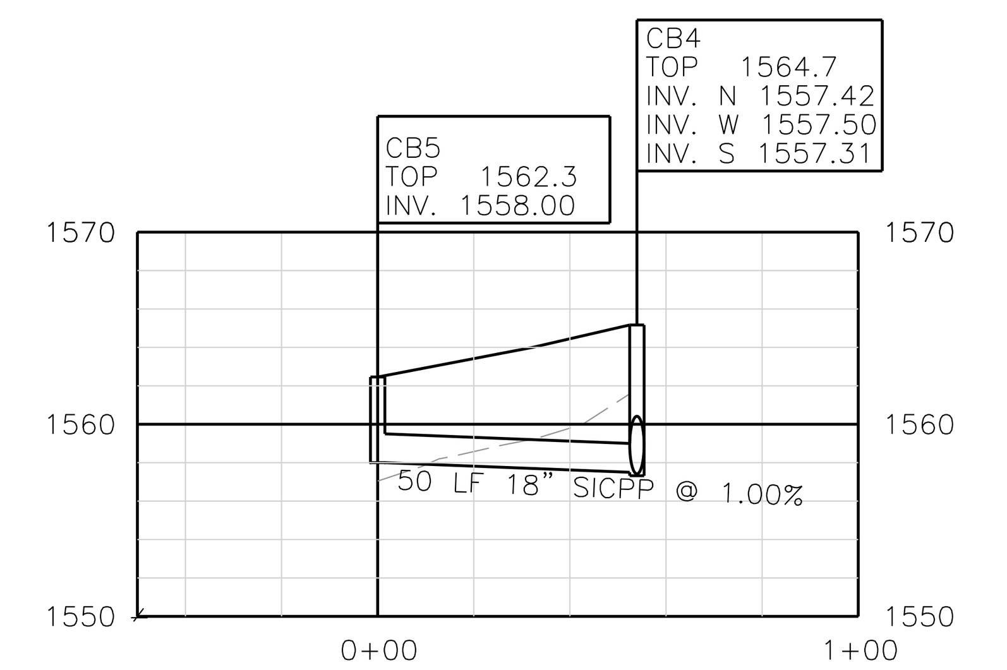


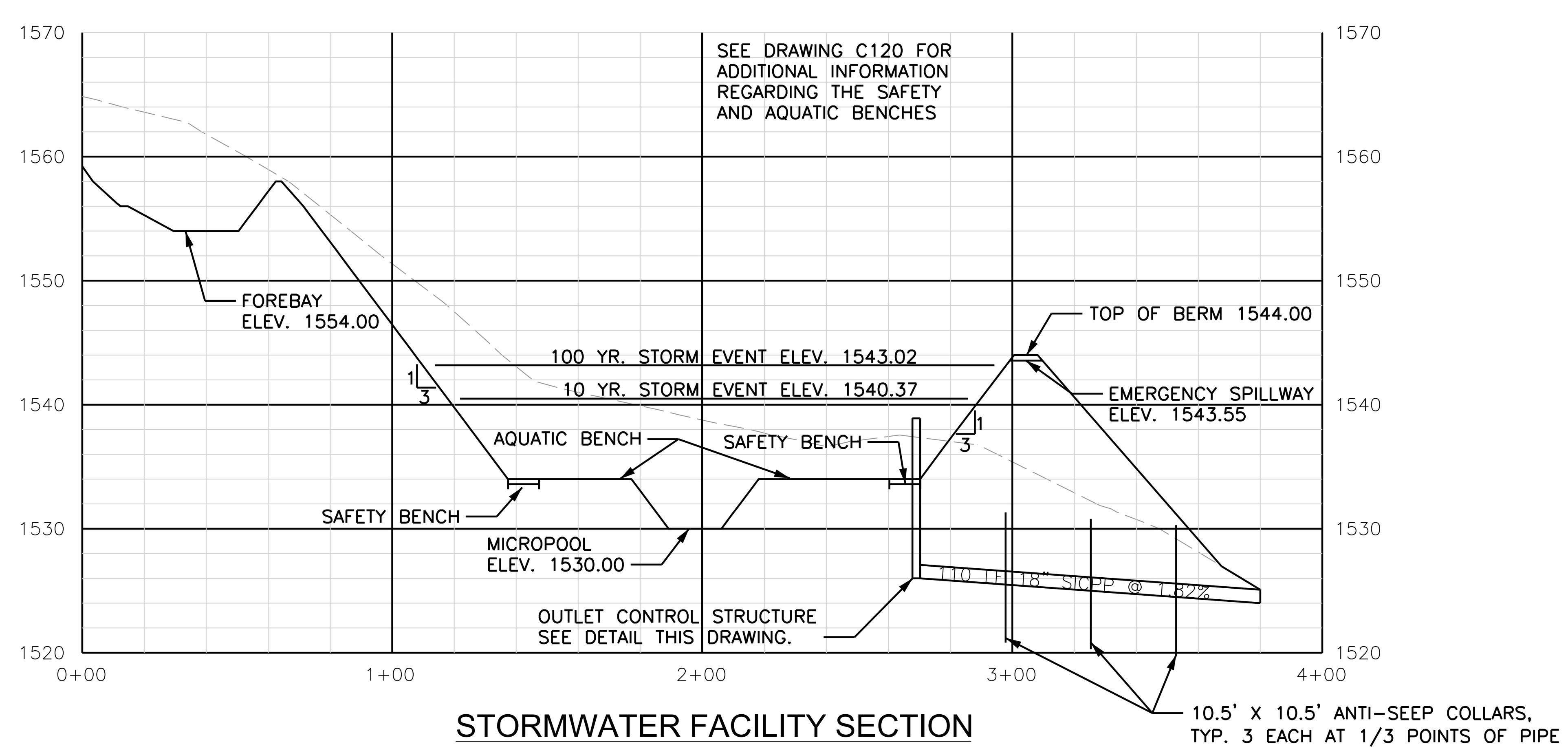
STORM DRAINAGE SYSTEM SECTION

SCALE: HORIZONTAL 1" = 40'
VERTICAL 1" = 10'



STORM DRAINAGE SYSTEM SECTION

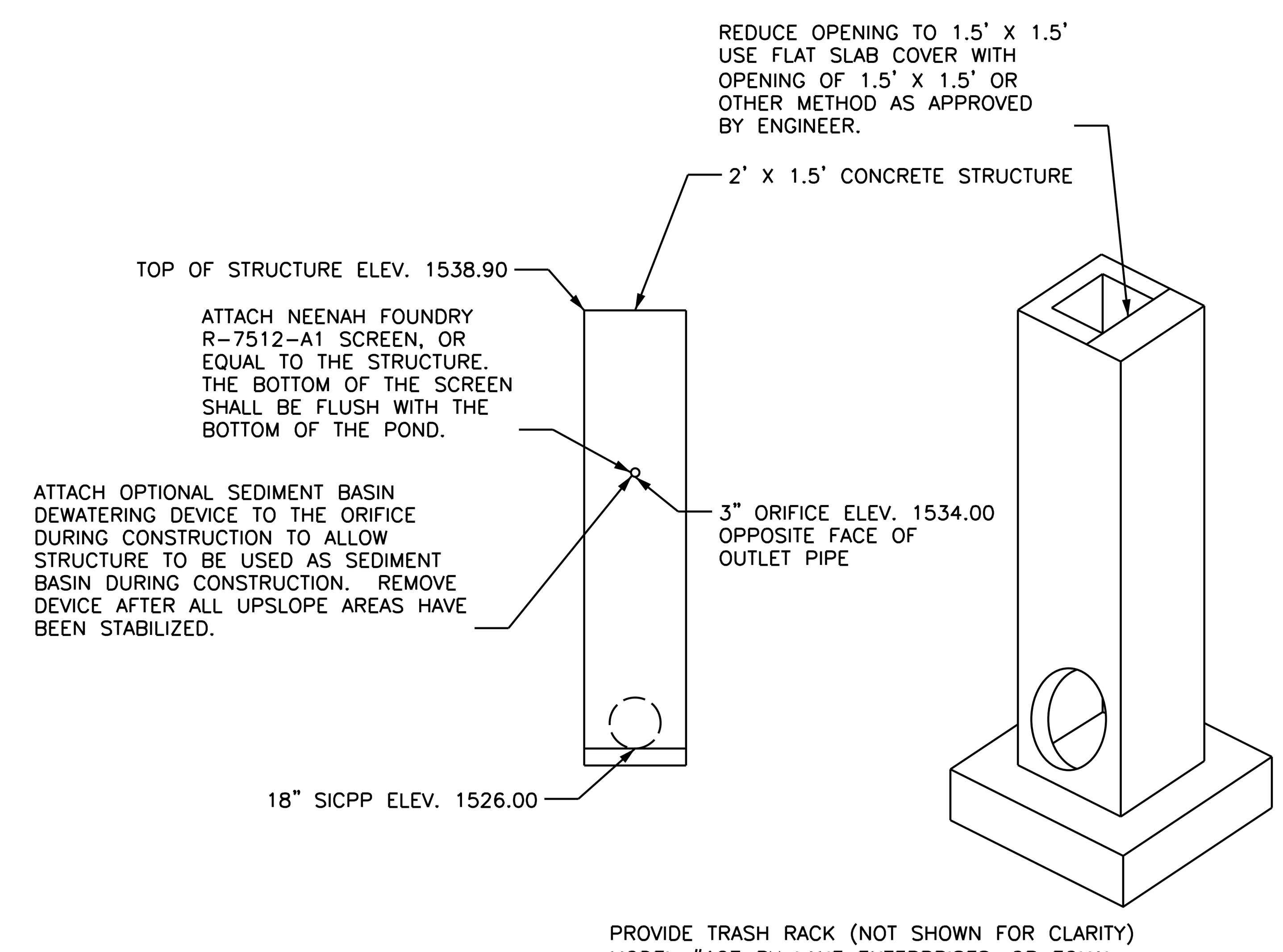
SCALE: HORIZONTAL 1" = 40'
VERTICAL 1" = 10'



STORMWATER FACILITY SECTION

SCALE: HORIZONTAL 1" = 40'
VERTICAL 1" = 10'

NOTE:
DO NOT INSTALL MICROPOOL WHILE STORMWATER FACILITY IS BEING USED AS A SEDIMENT BASIN. UPON STABILIZATION OF ALL UPSLOPE AREAS, REMOVE THE DEWATERING DEVICE, EXCAVATE THE MICROPOOL, AND STABILIZE ALL DISTURBED AREAS ASSOCIATED WITH THIS WORK.



OUTLET CONTROL STRUCTURE

NOT TO SCALE

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3	RE-SUBMITTAL PACKAGE	4/26/13
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1	REVISED TO PRELIMINARY PLAN	2/26/13

HILLSIDE COMMONS STUDENT HOUSING

CITY OF ONEONTA — OTSEGO COUNTY, NY

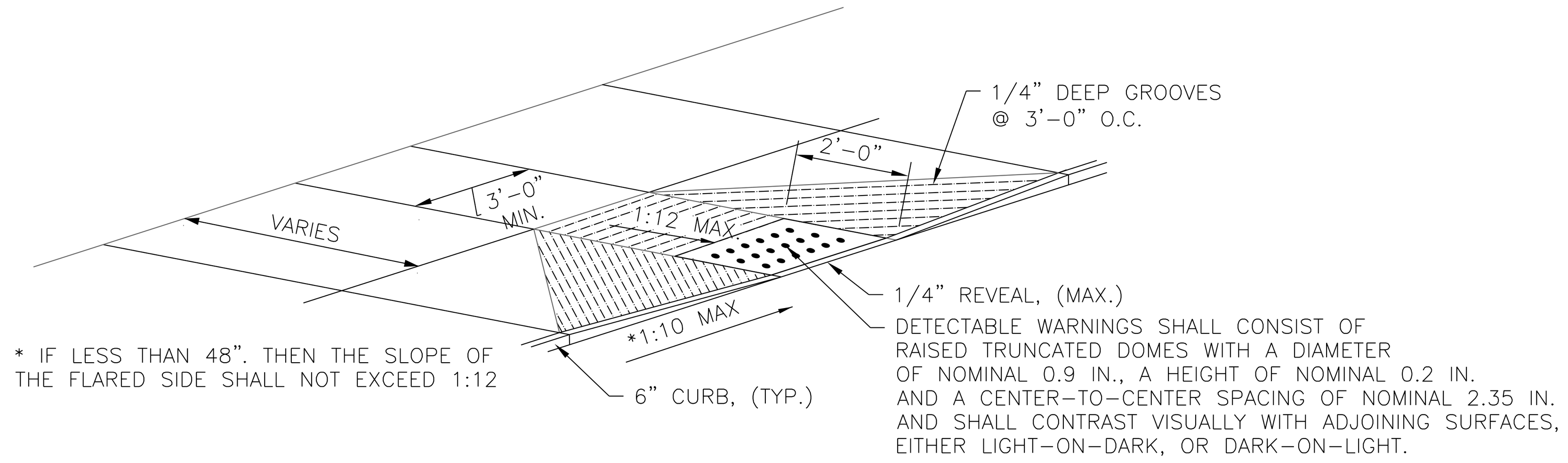
STORMWATER SECTIONS & DETAILS

SHEET NO. C210

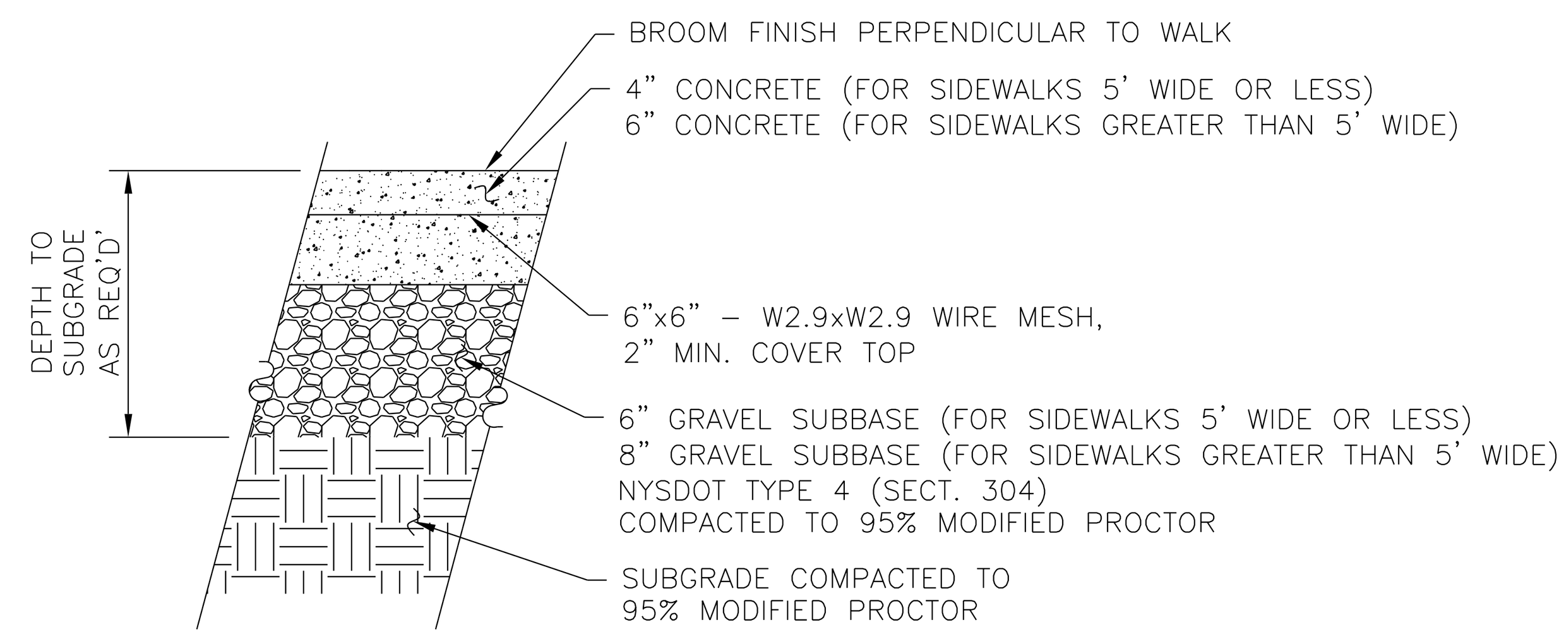
PROJECT NO. 200.26412

DATE: 02/20/13

CAD FILE NO.: 20026412_SITE.DGN



1 C220 CONCRETE CURB CUT (ACCESSIBLE RAMP)
N.T.S.



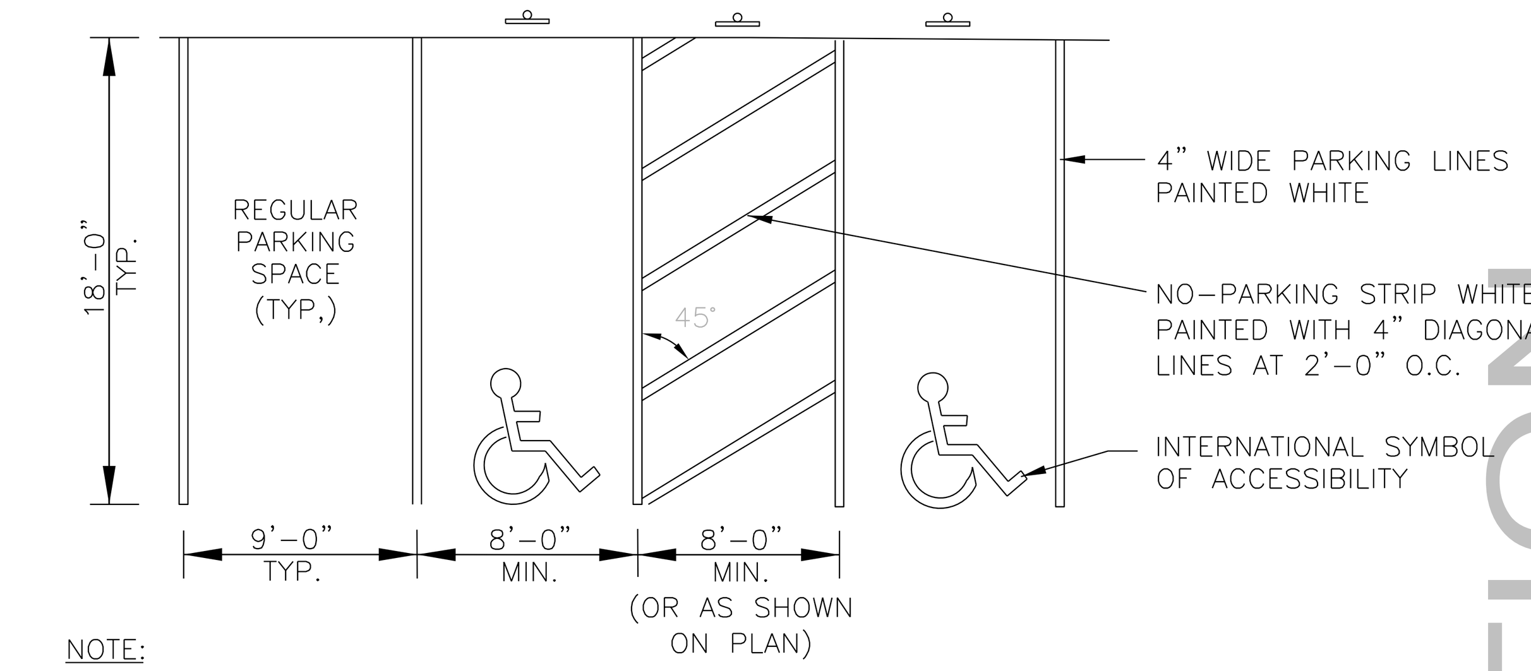
NOTES:
1. EXPANSION JOINT SPACING - 20' MAX. IN RUNS OF WALKS
   - 30' MAX. WHERE WALKS ABUT CONCRETE CURBS, STRUCTURES OR OTHER FIXED OBJECTS.
2. CONTROL JOINT SPACING - 5' O.C. (U.N.O.)
3. NOMINAL CROSS SLOPE - 1/8" MIN. TO 1/4" MAX. PER FOOT.

4 C220 CONCRETE WALK DETAIL
N.T.S.

ALL ACCESSIBLE PARKING SPACES SHALL INCLUDE ONE (1) SIGN THAT INCLUDES THE INTERNATIONAL SYMBOL OF ACCESSIBLITY TO BE PLACED AT THE FRONT OF EACH SPACE. SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE". SPACES SHALL BE IN ACCORDANCE WITH ICC/ANSI, A117.1, 2009, AND N.Y.S. UNIFORM FIRE PREVENTION & BUILDING CODE CHAPTER 11.

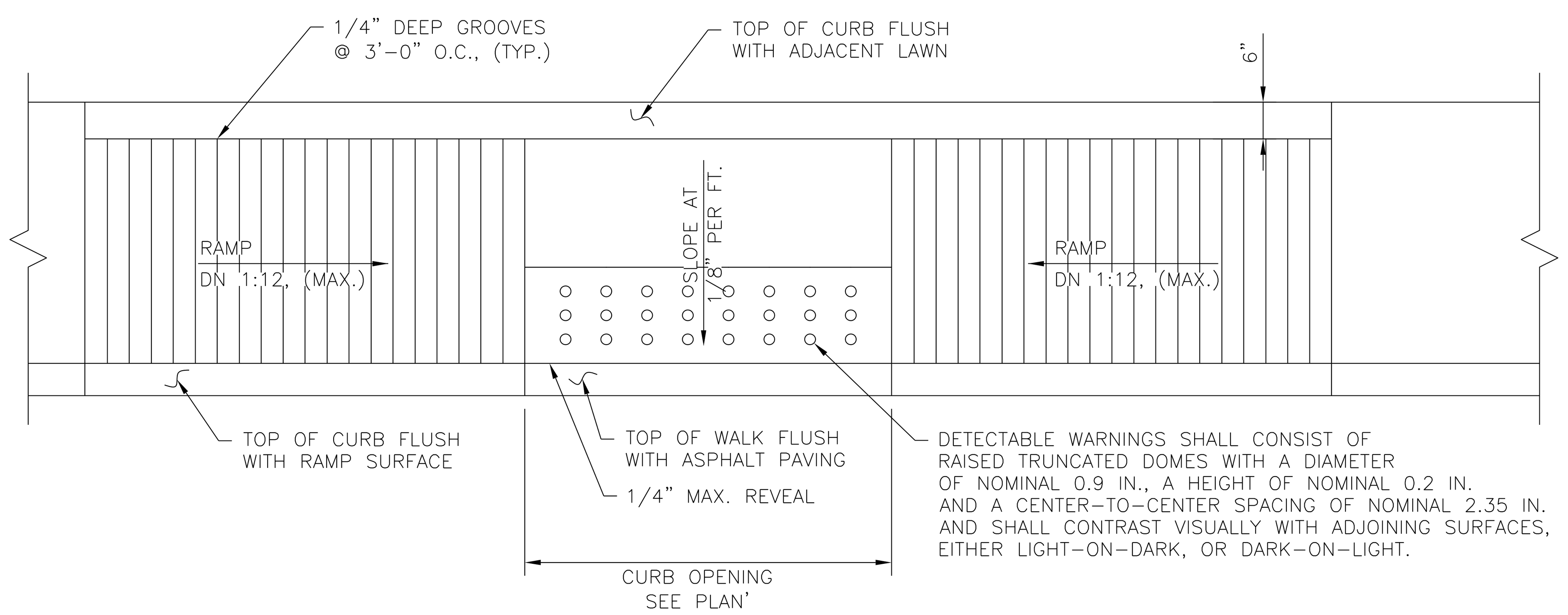
ACCESS AISLES SHALL BE DESIGNATED BY A SIGN READING "NO PARKING ANYTIME". THE SIGN SHALL BE LOCATED IN SUCH A WAY AS NOT TO OBSTRUCT THE ACCESS AISLE

ALL SIGNS SHALL BE PERMANENTLY INSTALLED AT A CLEAR HEIGHT OF NOT LESS THAN 5', NOR MORE THAN 7' ABOVE GRADE.

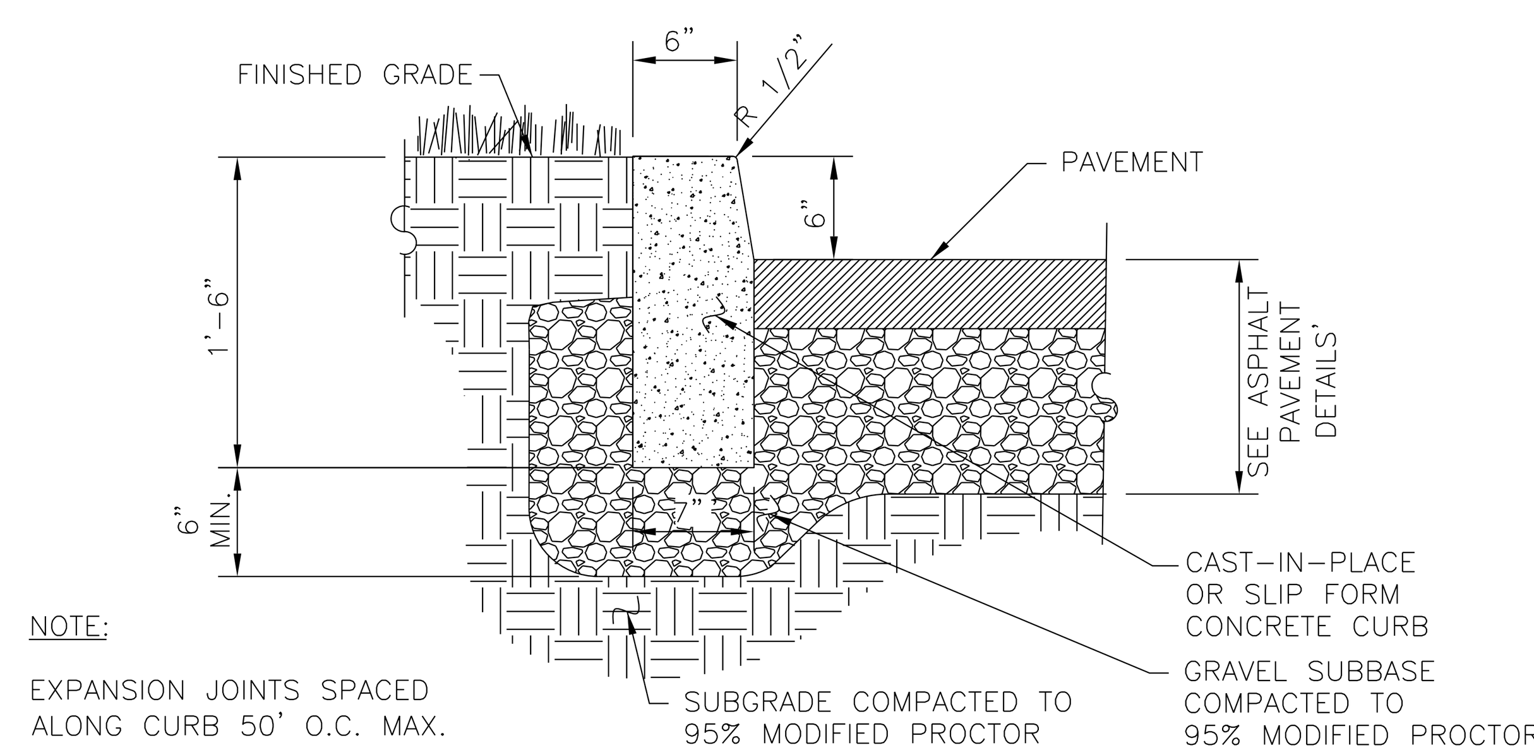


NOTE:
MAXIMUM SLOPE WITHIN ACCESSIBLE PARKING SPACE AND/OR STRIPED AISLE SHALL NOT EXCEED 1:50 (2%)

7 C220 PARKING STALL (REGULAR & ACCESSIBLE) DETAIL
N.T.S.

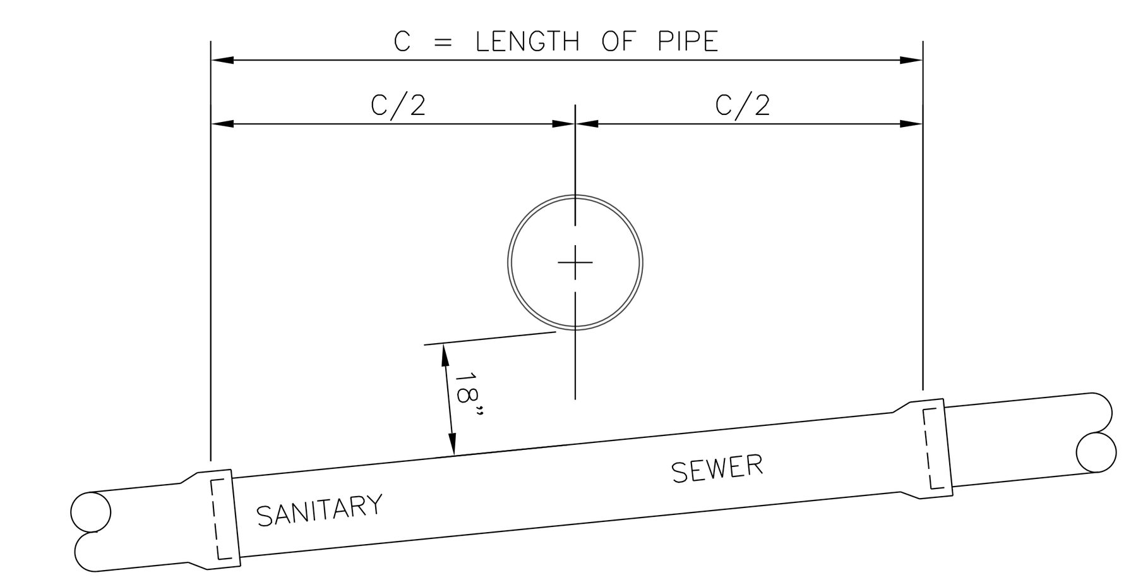


2 C220 CONCRETE CURB CUT (ACCESSIBLE RAMP)
N.T.S.



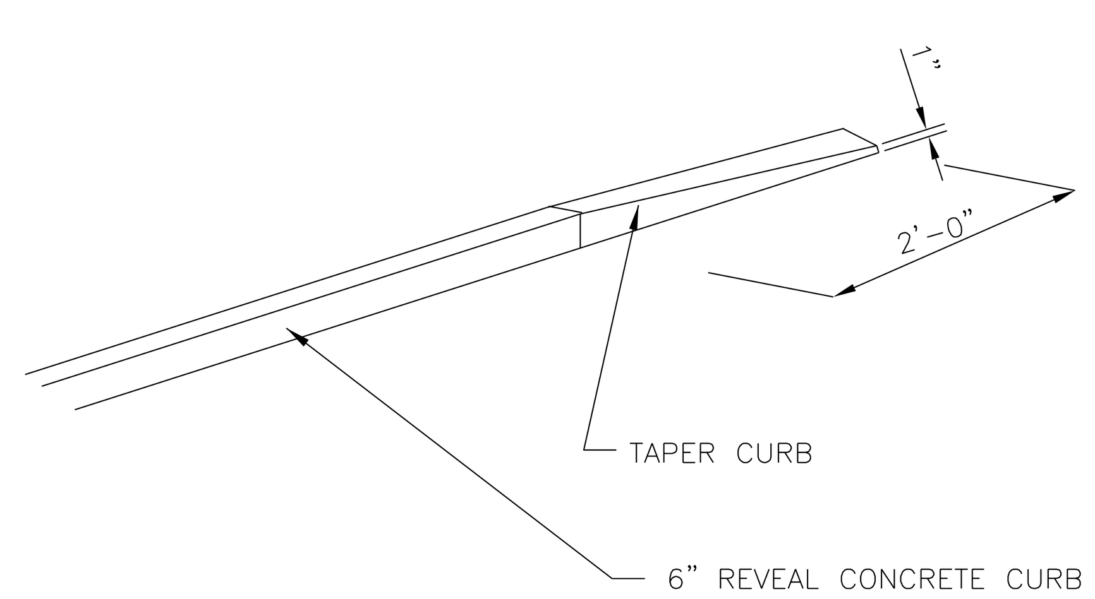
NOTE:
EXPANSION JOINTS SPACED ALONG CURB 50' O.C. MAX.

5 C220 CONCRETE CURB DETAIL AT LAWN
N.T.S.

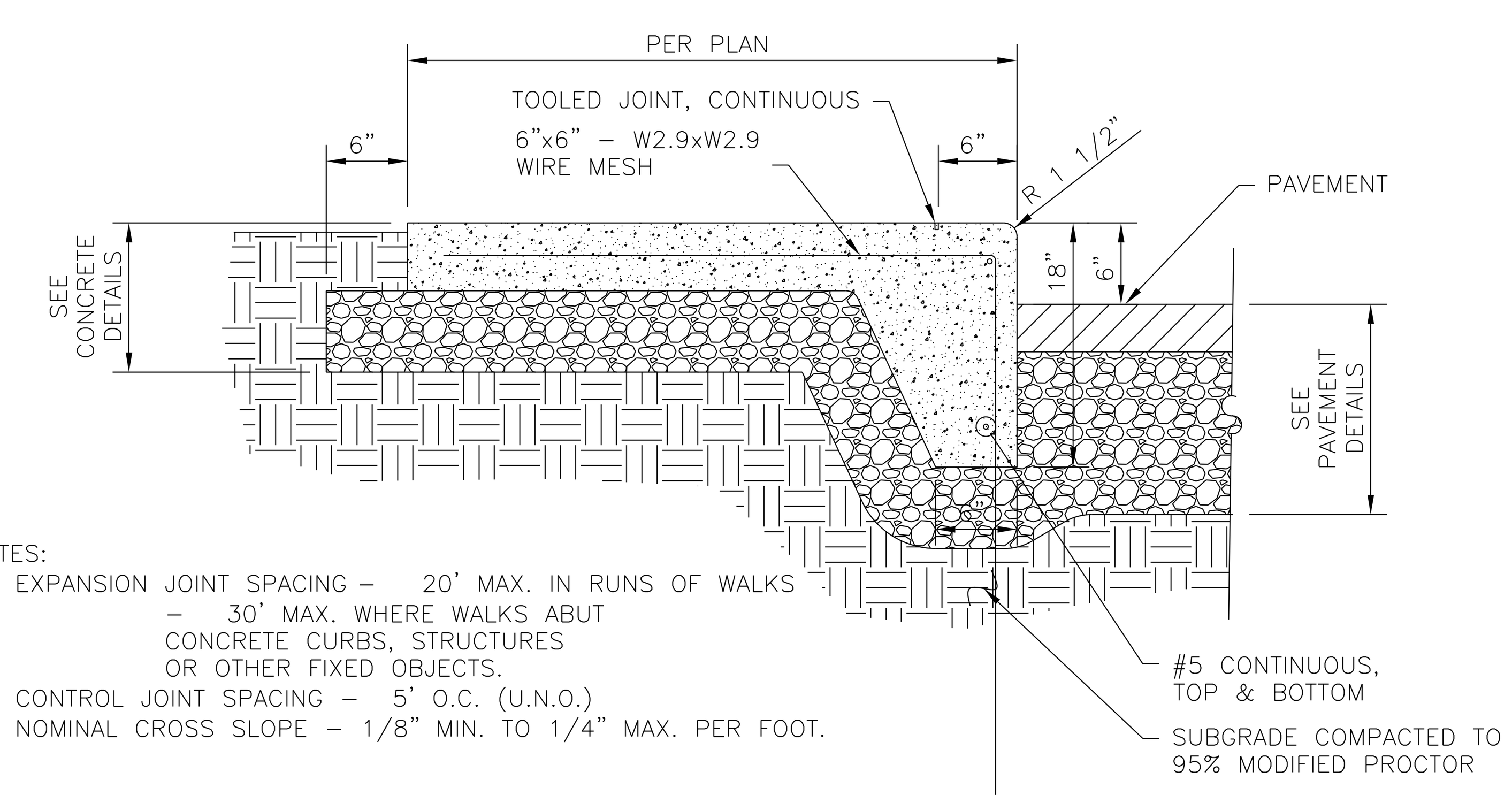


NOTES:
1. WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN & THE OUTSIDE OF THE SEWER. THIS WILL BE THE CASE WHETHER THE WATER MAIN PASSES ABOVE OR BELOW THE SEWER.
2. AT CROSSINGS ONE FULL LENGTH OF SEWER PIPE SHALL BE LAID SO BOTH JOINTS WILL BE AS FAR FROM THE WATER MAIN AS POSSIBLE. SEE DETAIL. WHERE THE SEWER HAS ALREADY BEEN INSTALLED, THE WATER MAIN SHALL BE PLACED SO THAT THE JOINTS ON THE WATER MAIN ARE EQUIDISTANT FROM THE SEWER.
3. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY SEWER MANHOLE.
4. IN THE EVENT THAT THERE IS A DEVIATION FROM ANY OF THE ABOVE REQUIREMENTS, SAID CHANGES MUST BE APPROVED BY THE STATE HEALTH DEPARTMENT PRIOR TO COMPLETION OF ANY SUCH CHANGES.

8 C220 SANITARY SEWER-WATER MAIN CROSSING DETAIL
N.T.S.

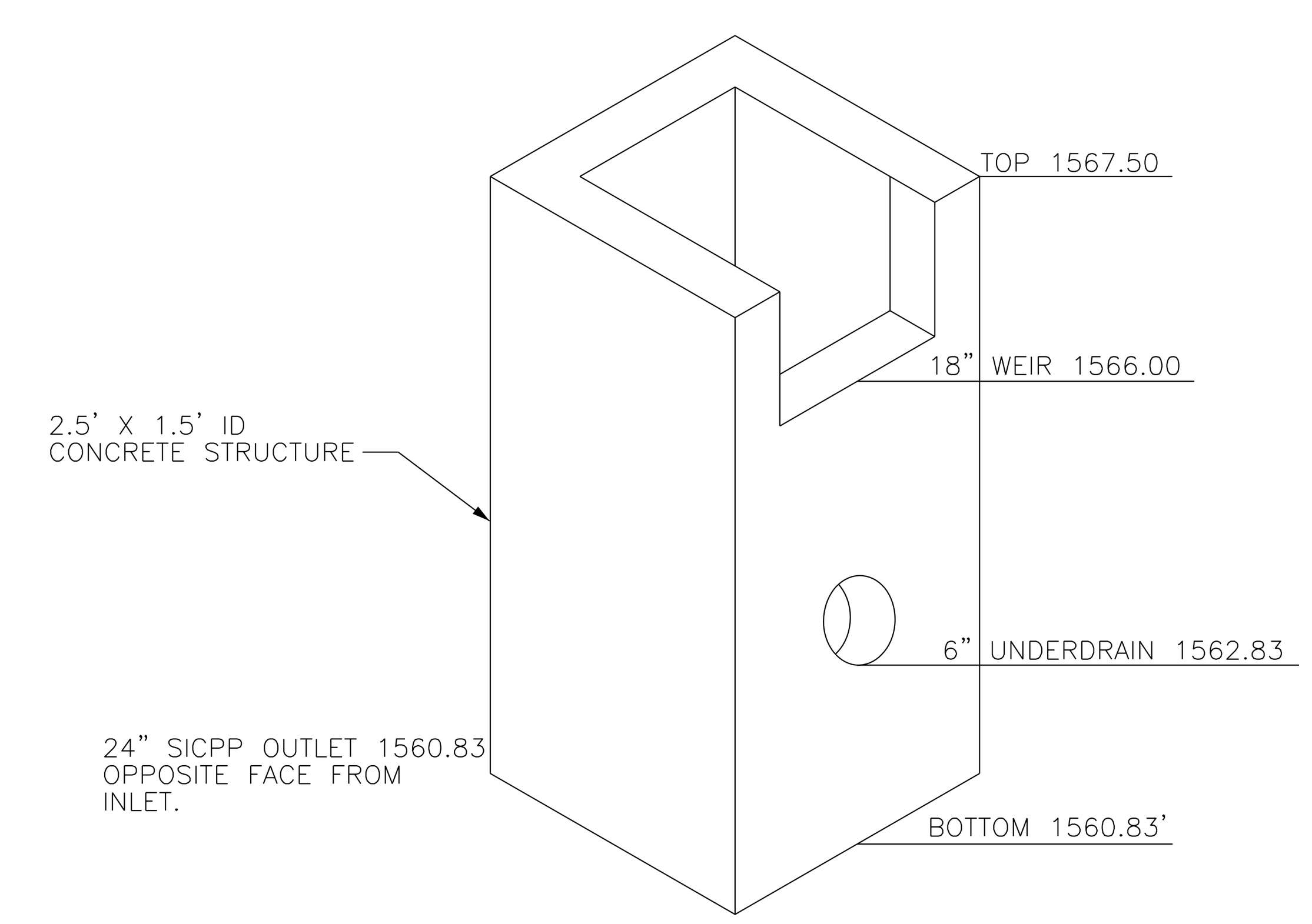


3 C220 CURB TAPER DETAIL
N.T.S.



NOTES:
1. EXPANSION JOINT SPACING - 20' MAX. IN RUNS OF WALKS
   - 30' MAX. WHERE WALKS ABUT CONCRETE CURBS, STRUCTURES OR OTHER FIXED OBJECTS.
2. CONTROL JOINT SPACING - 5' O.C. (U.N.O.)
3. NOMINAL CROSS SLOPE - 1/8" MIN. TO 1/4" MAX. PER FOOT.

6 C220 CONCRETE WALK/INTEGRAL CURB DETAIL
N.T.S.



PROVIDE TRASH RACK (NOT SHOWN FOR CLARITY) MODEL #138 FOR THE FRONT WEIR OPENING AND A FLUSH TRASH RACK FOR THE TOP. INLET FROM DRY SWALE AND STORMWATER PLANTER NOT SHOWN FOR CLARITY.

9 C220 STORMWATER INLET DETAIL
N.T.S.

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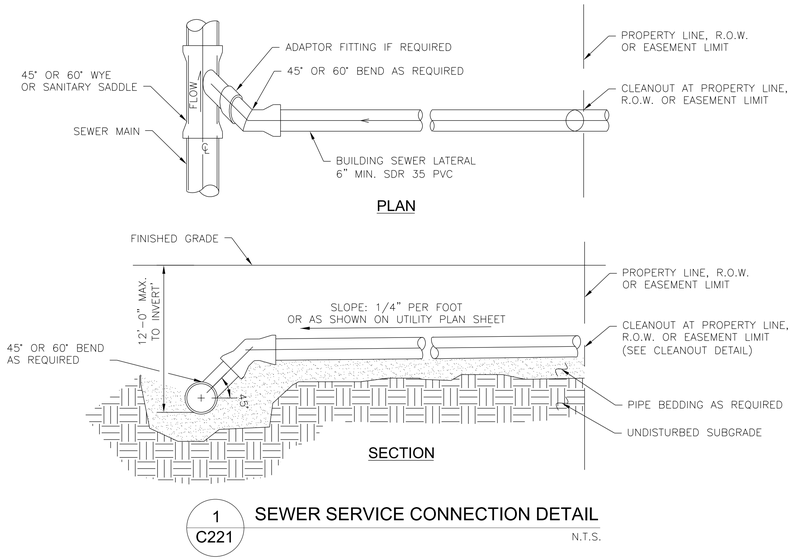
www.keystcomp.com

NO.	REVISIONS AND DESCRIPTIONS	DATE
3	RE-SUBMITTAL PACKAGE	4/26/13
2	REV. 3/26/13 CITY LETTER	4/12/13
1	REVISED TO PRELIMINARY PLAN	2/20/13

HILLSIDE COMMONS STUDENT HOUSING
CITY OF ONEONTA — OTSEGO COUNTY, NY

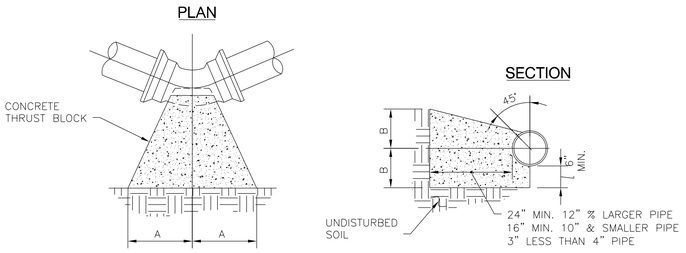
SITE DETAILS

SHEET NO. **C220**
PROJECT NO. 200.26412
DATE: 02/20/13
CAD FILE NO.: 20026412_SITE.DGN



1 C221 SEWER SERVICE CONNECTION DETAIL

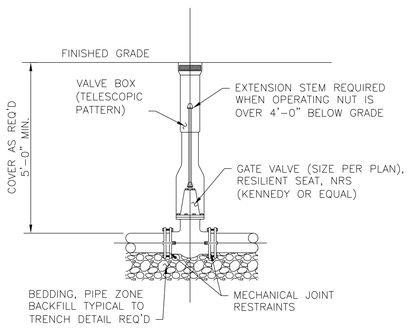
N.T.S.



SIZE OF WATER MAIN	90° BEND		45° BEND		22 ½° BEND		11 ¼° BEND	
	A	B	A	B	A	B	A	B
6"	16"	10"	9"	10"	6"	8"	6"	8"
8"	22"	13"	12"	13"	8"	10"	8"	10"
10"	26"	17"	14"	17"	10"	13"	10"	13"
12"	29"	21"	16"	21"	11"	16"	11"	16"
16"	31"	26"	18"	25"	12"	19"	12"	19"

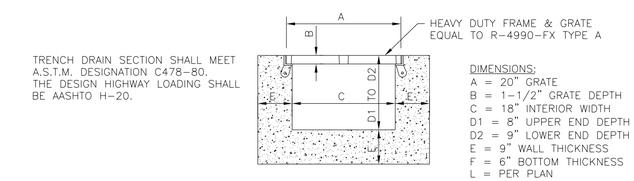
2 C221 11-1/4 DEG THRU 90 DEG BEND THRUST BLOCK DETAIL

N.T.S.



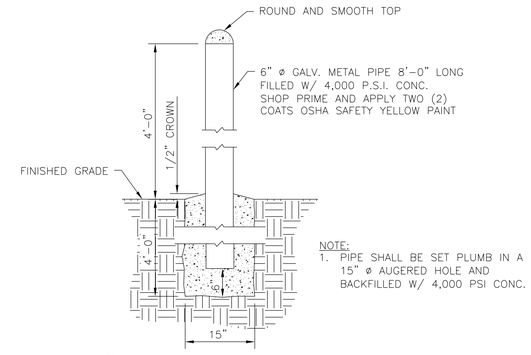
3 C221 VALVE BOX DETAIL

N.T.S.



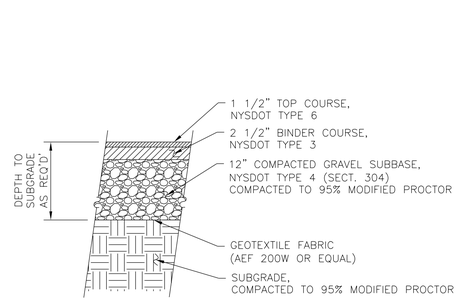
4 C221 TYPICAL TRENCH DRAIN DETAIL

N.T.S.



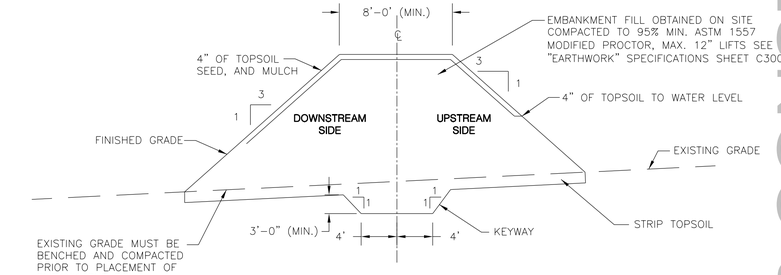
6 C221 BOLLARD DETAIL

N.T.S.



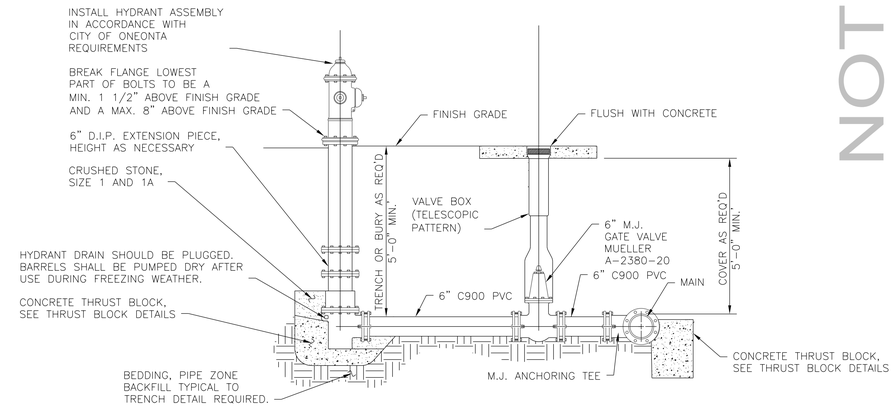
5 C221 ASPHALT PAVEMENT DETAIL

N.T.S.



7 C221 TYPICAL BERM SECTION

N.T.S.



8 C221 HYDRANT ASSEMBLY DETAIL

N.T.S.

NOT FOR CONSTRUCTION

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KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

NO.	DESCRIPTION	DATE
1	PLANNING BOARD	1/28/13
2	REVISED TO PRELIMINARY PLAN	1/31/13
3	RE-SUBMITTAL PACKAGE	2/20/13
4	REV. 3/28/13 CITY LETTER	3/28/13

HILLSIDE COMMONS
STUDENT HOUSING
CITY OF ONEONTA
OTSEGO COUNTY, NY

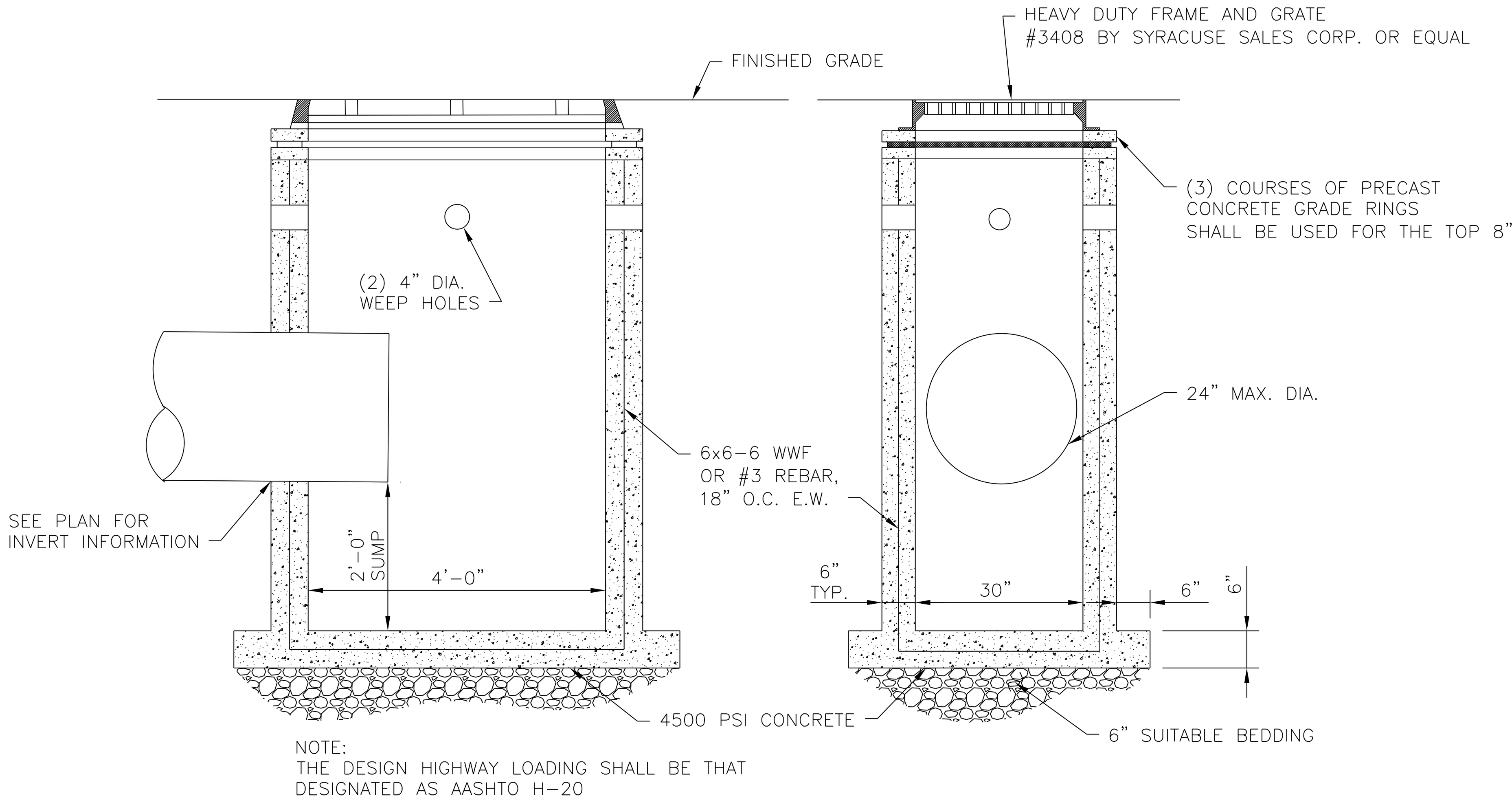
SITE DETAILS

SHEET NO.
C221

PROJECT NO.
200.26412

DATE: 02/20/13

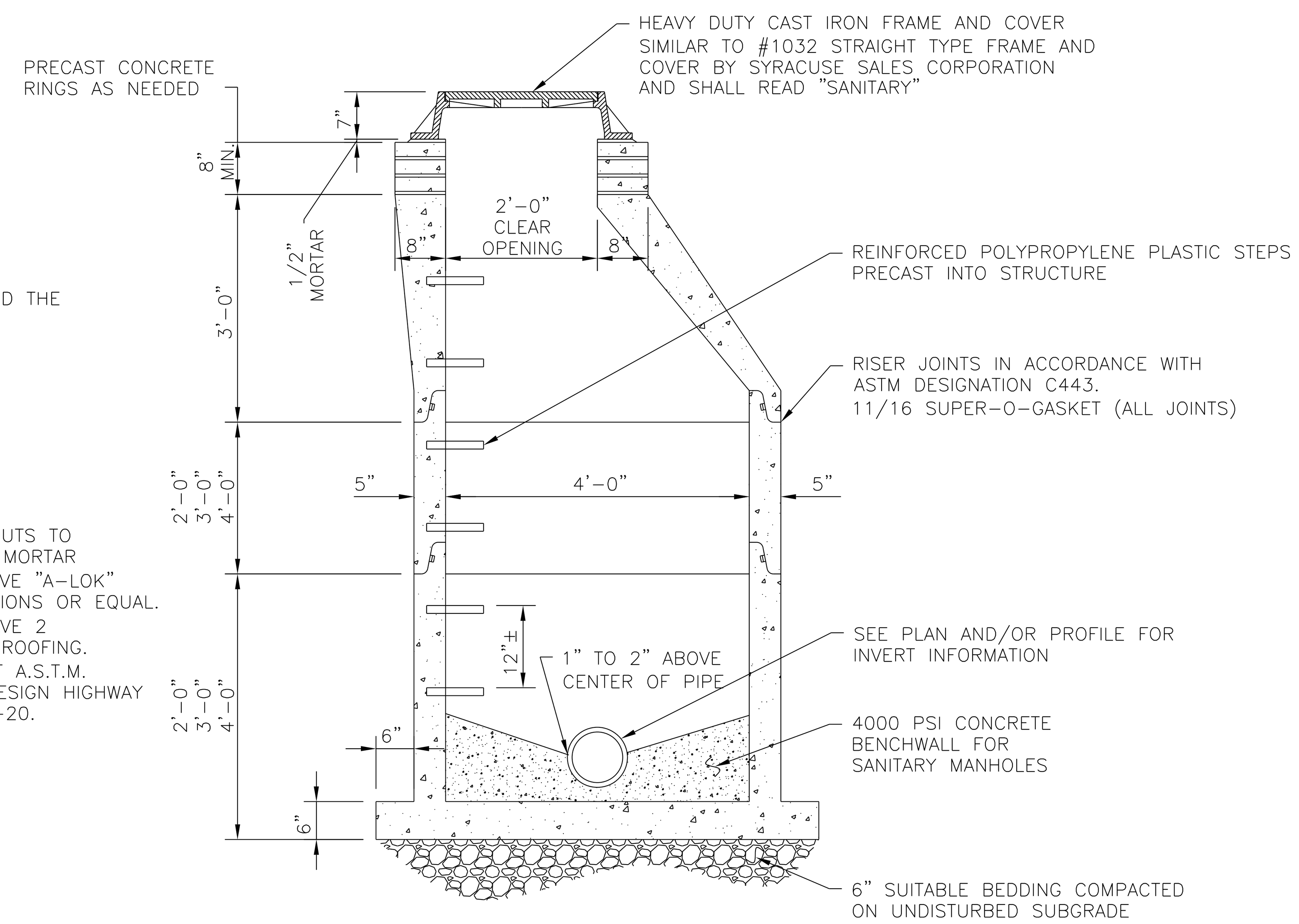
CAD FILE NO.: 20026412_SITE.DGN



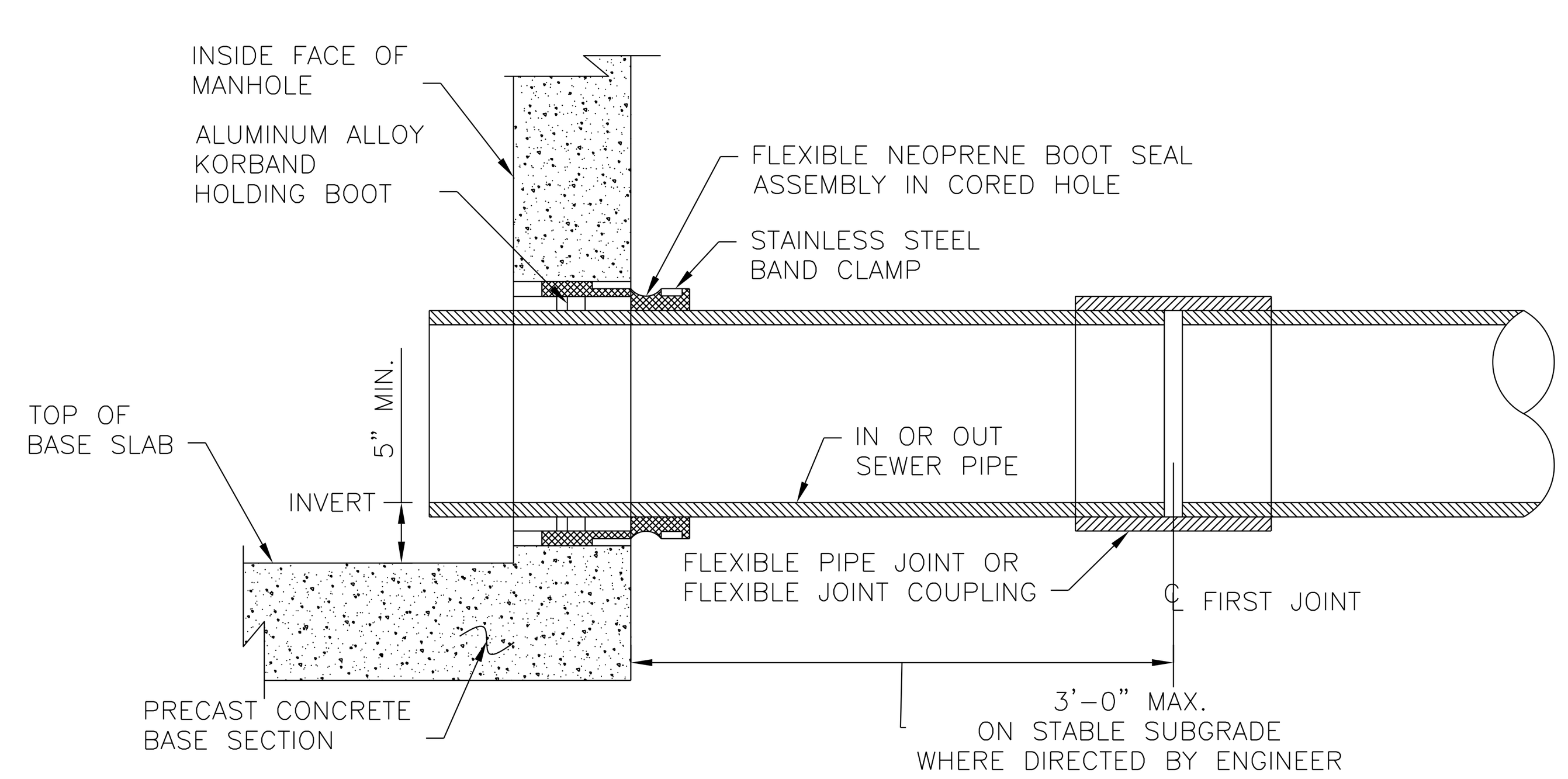
1
C222
CATCH BASIN DETAIL - TYPE "A"
N.T.S.

2' MAX. BETWEEN THE COVER AND THE
FIRST STEP.

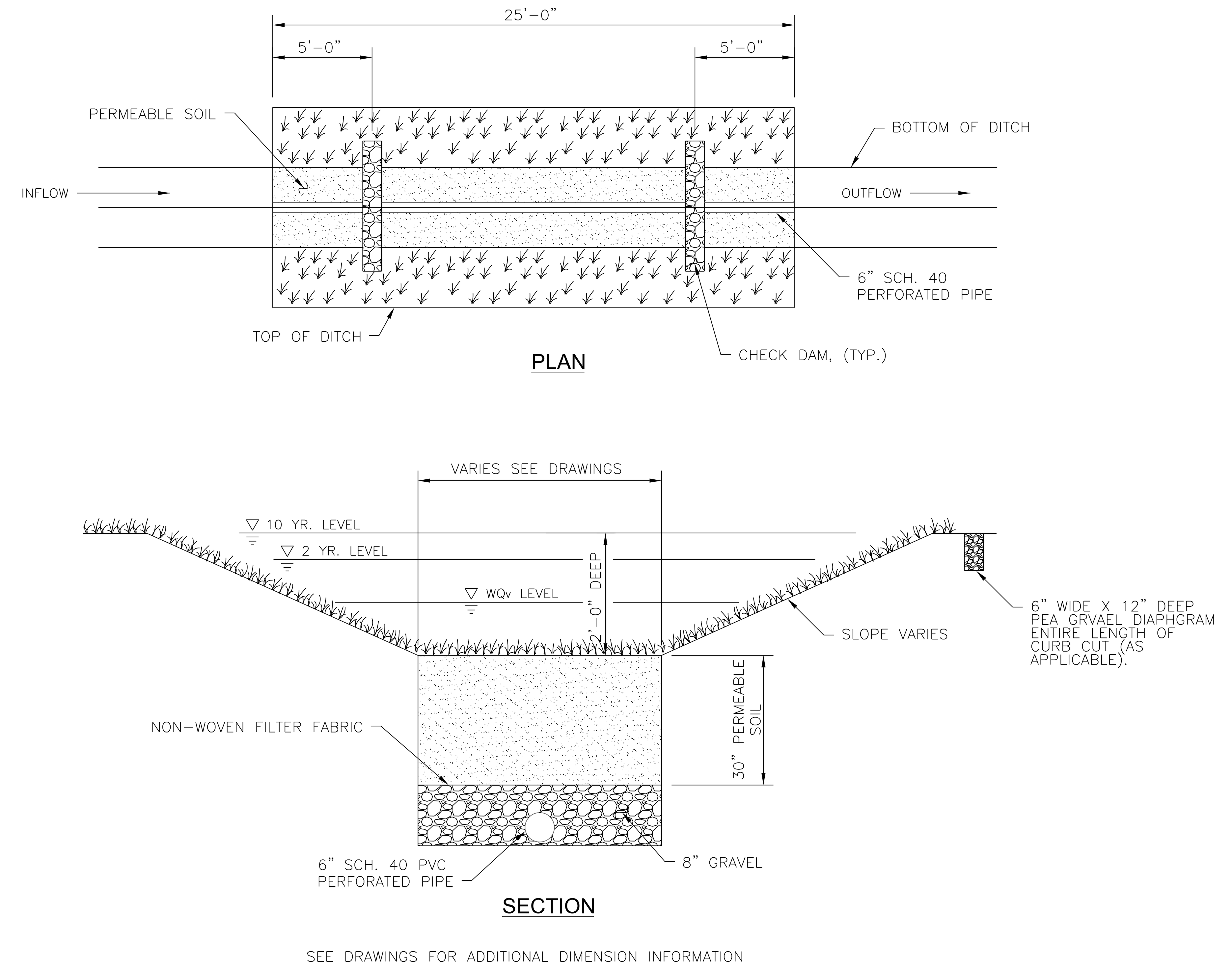
NOTE:
1) LIFTING HOLES AND PIPE CUTOUTS TO BE GROUTED WITH EXPANDING MORTAR
2) SANITARY MANHOLES SHALL HAVE "A-LOK" FLEXIBLE LEAKPROOF CONNECTIONS OR EQUAL.
3) SANITARY MANHOLES SHALL HAVE 2 COATS OF BITUMINOUS WATERPROOFING.
4) MANHOLE SECTION SHALL MEET A.S.T.M. DESIGNATION C478-80. THE DESIGN HIGHWAY LOADING SHALL BE AASHTO H-20.



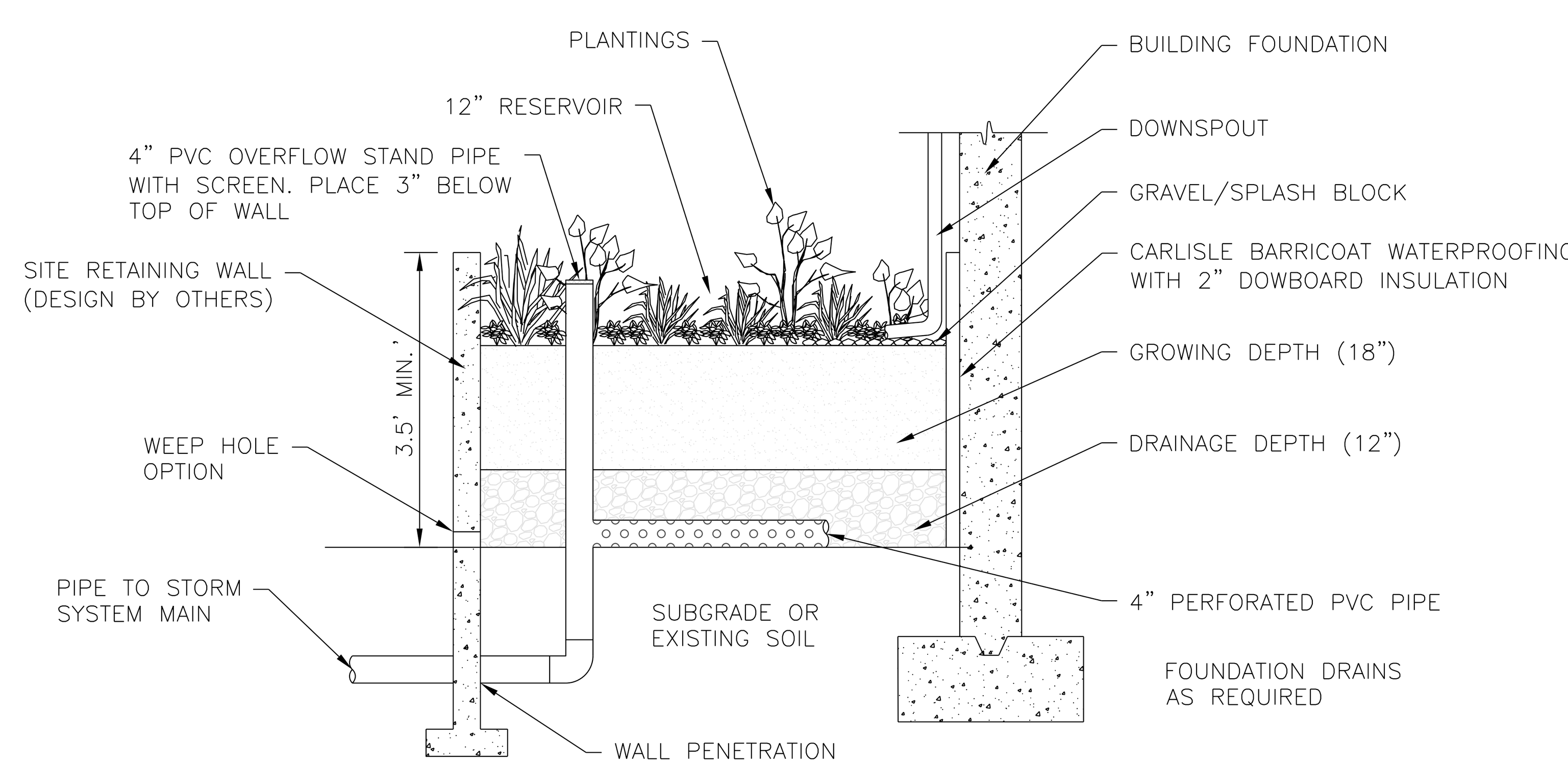
2
C222
MANHOLE DETAIL
N.T.S.



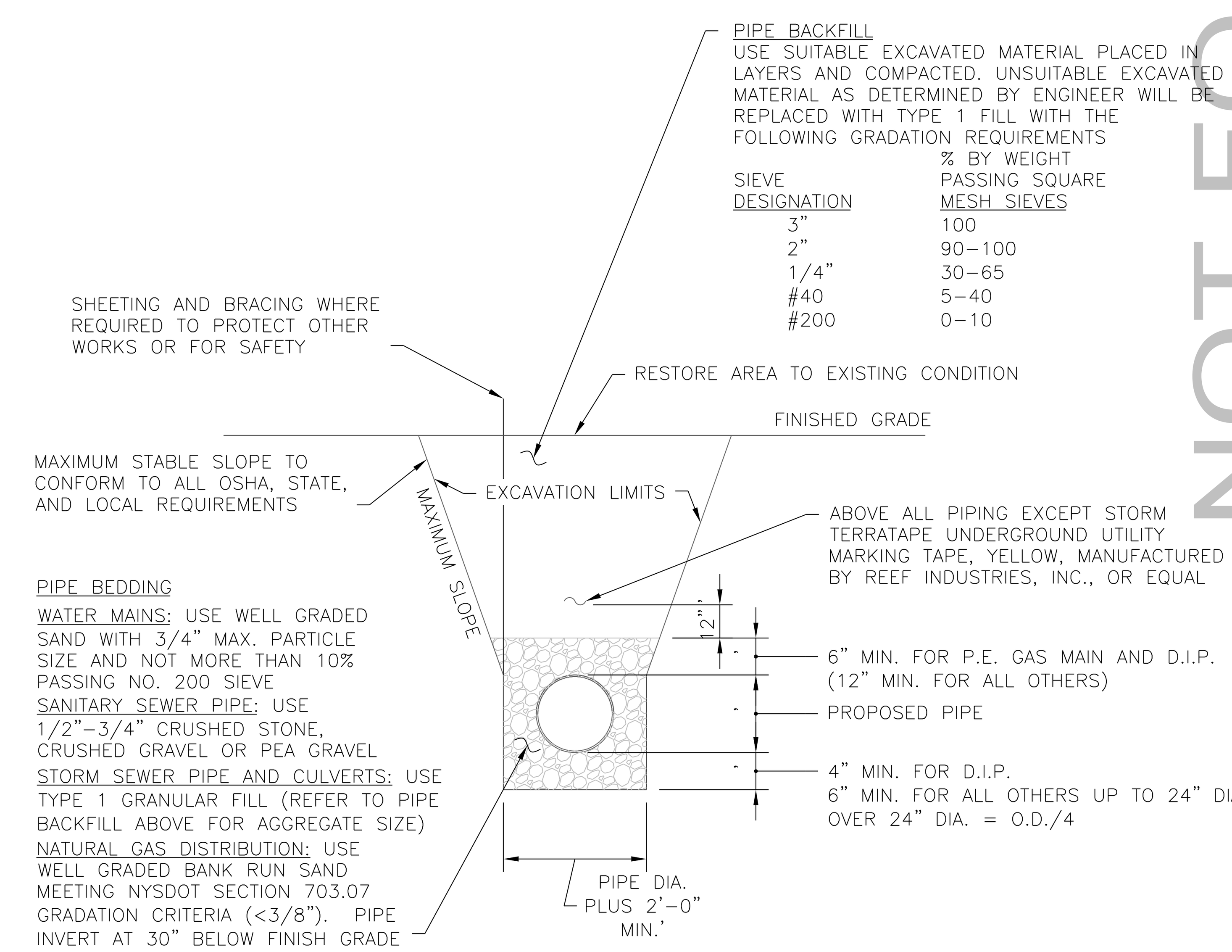
3
C222
CONNECTION TO EXISTING MANHOLE DETAIL
N.T.S.



4
C222
DRYSWALE DETAIL
N.T.S.



5
C222
STORMWATER PLANTER DETAIL
N.T.S.



6
C222
PIPE TRENCH DETAIL
N.T.S.

NOT FOR CONSTRUCTION

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HILLSIDE COMMONS
STUDENT HOUSING
CITY OF ONEONTA
OTSEGO COUNTY, NY

SITE DETAILS

SHEET NO.
C222
PROJECT NO.
200.26412
DATE: 02/20/13
CAD FILE NO.: 20026412_SITE.DGN

GENERAL CONSTRUCTION CONDITIONS

1. THE TERM OF OWNER AS USED IN THESE SPECIFICATIONS AND NOTES SHALL INCLUDE THE OWNER OF THE PROPERTY, THE COMPANY OR PARTY THAT HIRED THE CONTRACTOR, THE COMPANY OR PARTY THAT SIGNED THE CONTRACT FOR THIS WORK AND THE AGENTS OF EACH. THE OWNER'S REPRESENTATIVE SHALL BE THE INDIVIDUAL OR PARTY ASSIGNED BY THE OWNER TO BE THE OWNER'S REPRESENTATIVE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY PERMITS, CONNECTION PERMITS, FEES, INSPECTIONS AND RECORD KEEPING REQUIRED BY ALL MUNICIPAL, UTILITY, HEALTH, ENVIRONMENTAL, STATE OR FEDERAL AGENCIES THAT MAY HAVE JURISDICTION. FURTHERMORE, THE CONTRACTOR SHALL BE RESPONSIBLE TO MEET OR EXCEED ALL REQUIREMENTS OF THE AGENCIES OR AUTHORITIES HAVING JURISDICTION OVER HIS WORK. ALL CONFLICTS IN REQUIREMENTS OF DIFFERENT AGENCIES, AUTHORITIES AND/OR THE DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND MAINTAIN THE PROPERTY AND PROJECT LIMITS THROUGHOUT THE PROJECT. ALL CONFLICTS BETWEEN THE DESIGN AND THE PROJECT/PROPERTY LIMITS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING. UNLESS DESCRIBED IN THE CONTRACT DOCUMENTS OR SHOWN ON THE DRAWINGS THE OWNER HAS NOT SECURED ANY RIGHT OF WAYS, EASEMENTS OR AGREEMENTS WITH OTHER PROPERTY OWNERS OR PROPERTY USERS. THEREFORE, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SECURE AND MAINTAIN ANY TEMPORARY RIGHT OF WAYS, EASEMENTS, PERMITS OR AGREEMENTS HE MAY NEED TO PERFORM HIS WORK. ALL SUCH AGREEMENTS SHALL HOLD THE OWNER, ENGINEER AND HIS AGENTS HARMLESS AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL COSTS. THE CONTRACTOR SHALL COPY THE OWNER ON RELEASES OF ALL AGREEMENTS PRIOR TO FINAL PAYMENT BY THE OWNER TO THE CONTRACTOR.
4. UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE CONTRACT DOCUMENTS THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION SURVEY, LAYOUT AND RECORD DRAWINGS FOR THIS CONTRACT. ANY CONFLICTS IN SURVEY/LAYOUT AND THE DESIGN OR AGENCIES REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL PROTECT AND SAFEGUARD ALL EXISTING SURVEY MONUMENTS, CONTROL AND TIE-DOWNS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH ERRORS IN THE STAKE-OUT AND LOCATION OF HIS WORK. THE CONTRACTOR SHALL PAY ALL COSTS TO REPAIR OR REPLACE DAMAGED SURVEY MONUMENTS, CONTROL AND TIE-DOWNS.
5. NO CHANGES TO THE DESIGN OR MATERIALS SPECIFIED MAY BE MADE WITHOUT WRITTEN AUTHORIZATION BY THE ENGINEER OR IN THE CASE OF UTILITIES OR ROAD WORK TO BE DEDICATED, THE AUTHORITY RECEIVING DEDICATION. THE CONTRACTOR SHALL PROVIDE TO THE OWNER AT THE END OF THE CONTRACT A RECORD SET OF DRAWING REFLECTING ALL CHANGES MADE BY THE CONTRACTOR DURING CONSTRUCTION.
6. EROSION CONTROL IS NECESSARY WHEN SEDIMENT, DUST, EROSION, OR CONTAMINATED RUN-OFF MAY OCCUR. THE CONTRACTOR SHALL BE RESPONSIBLE TO PLACE AND MAINTAIN EROSION CONTROL OR RUN-OFF PROTECTION AS REQUIRED TO PROTECT HIS WORK, THE WORK OF HIS SUBCONTRACTORS, OR OTHER PARTIES ASSOCIATED WITH THE PROJECT, ADJACENT PROPERTIES AND THE HEALTH AND WELL BEING OF THE WORKERS, PUBLIC AND SURROUNDING NATURAL RESOURCES. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS REGARDING EROSION AND RUN-OFF CONTROL AND SHALL SIGN A CERTIFICATION STATEMENT INDICATING THAT HE UNDERSTANDS AND WILL COMPLY WITH THE SITE'S STORMWATER POLLUTION PREVENTION PLAN IF ONE WAS PREPARED FOR THE PROJECT.
7. THE CONTRACTOR SHALL BE FAMILIAR WITH THE PROJECT SITE AND ALL ADJACENT PEDESTRIAN, TRAFFIC AND BUSINESS USES. THE CONTRACTOR SHALL TAKE WHAT EVER PRECAUTIONS AND STEPS NECESSARY TO MAINTAIN SAFETY AND OPERATION OF THESE USES IN ACCORDANCE WITH FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS AND DAMAGES CAUSED FROM HIS FAILURE TO TAKE PROPER AND ADEQUATE PRECAUTIONS. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS REGARDING THESE USES INCLUDING BUT NOT LIMITED TO THE MAINTENANCE AND PROTECTION OF TRAFFIC REQUIRED BY THE STATE DEPARTMENT OF TRANSPORTATION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS AND DELAYS ASSOCIATED WITH WEATHER, GROUNDWATER, AND OTHER OCCURRENCES THAT COULD BE EXPECTED OR ARE COMMON WITH THIS TYPE WORK. THE CONTRACTOR SHALL REVIEW ALL PERTINENT DOCUMENTS INCLUDING SOILS REPORTS, SOILS BORINGS AND OTHER SOIL OR SITE DATA.
9. THE CONTRACTOR SHALL BE RESPONSIBLE TO SAVE AND PROTECT HIS WORK THROUGHOUT THE CONTRACT. ANY DAMAGES REQUIRING REPAIRS OR REPLACEMENT SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.
10. WHEN WORK IS DONE WITHIN A ROAD, UTILITY OR PRIVATE EASEMENT, RIGHT-OF-WAY, OR OTHER PROPERTY AGREEMENT THE CONTRACTOR SHALL DO ALL WORK WITHIN THAT AREA PER THE AUTHORITY HAVING JURISDICTION.
11. WHEN SEPARATE SITE AND BUILDING CONTRACTS ARE PERFORMED THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO BRING UTILITIES TO WITHIN 5 FEET OF BUILDING FACE UNLESS NOTED OTHERWISE ON DRAWINGS OR CONTRACT DOCUMENTS.
12. ALL EXISTING UTILITIES ARE SHOWN PER SURFACE SURVEYS AND/OR RECORD MAPS AND MAY VARY FROM ACTUAL IN FIELD LOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY STAKEOUTS AND LOCATING UTILITIES PRIOR TO COMMENCING WORK. ANY DAMAGE TO UTILITIES DUE TO IMPROPER STAKEOUT, LACK OF STAKEOUT OR THE FAILURE TO VERIFY DIFFERENCES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, REPLACE, OR PAY DAMAGES AT NO EXPENSE TO THE CONTRACT.
13. CONTRACTOR SHALL FURNISH AND APPLY WATER AND/OR CALCIUM CHLORIDE AS NECESSARY TO CORRECT DUSTY CONDITIONS RESULTING FROM LOCAL TRAFFIC ON THE STREET OR CONTRACTORS OPERATIONS.
14. REFER TO PROJECT MANUAL, IF APPLICABLE, FOR ADDITIONAL CONTRACT REQUIREMENTS AND SPECIFICATIONS.

CLEAR AND GRUB

1. THE CONTRACTOR SHALL REVIEW PLANS AND IDENTIFY AND SAFELY MARK ALL PLANTS AND TREES TO BE SAVED. THE CONTRACTOR SHALL PROTECT ALL PLANTS AND TREES TO BE SAVED THROUGHOUT THE CONTRACT. THIS SHALL INCLUDE PROHIBITING ANY WORK WITHIN THE DRIP LINE OF THE TREE EXCEPT UNDER THE SUPERVISION OF A LICENSED LANDSCAPE ARCHITECT.
2. ALL AREAS TO BE CLEARED AND GRUBBED SHALL BE SURVEYED IN THE FIELD TO ESTABLISH THE APPROPRIATE LIMITS OF WORK.
3. THE CONTRACTOR SHALL TAKE WHATEVER MEASURES NECESSARY TO LOCATE AND PROTECT EXISTING UTILITIES, STRUCTURES, AND OTHER FACILITIES TO REMAIN.
4. ALL TREES, SHRUBS, STUMPS, ROOTS AND OTHER DEBRIS SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
5. NO BURNING OR BURYING WILL BE ALLOWED ON SITE.

EARTHWORK

1. PRIOR TO STARTING ANY CUTS OR FILLS THE CONTRACTOR SHALL STRIP AND STOCKPILE ALL TOPSOIL. STRIPPING OF TOPSOIL CAN ONLY COMMENCE AFTER THE CLEAR AND GRUB OPERATIONS ARE COMPLETE IN THAT AREA. TOPSOIL SHALL BE STOCKPILED IN AREAS DESIGNATED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL REVIEW THE SOILS REPORTS, BORING LOGS AND WHEN NECESSARY HIS OWN FIELD VERIFICATION SO AS TO BE FAMILIAR WITH THE DEPTH OF TOPSOIL. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO PREVENT OVER AND UNDER REMOVAL OF TOPSOIL.
2. THE GRADES SHOWN ON THE PLANS UNLESS OTHERWISE NOTED ARE FINISHED GRADES, THEREFORE, PAVEMENT, FLOORS, SUBBASE AND OTHER IMPROVEMENTS MUST BE SUBTRACTED TO CALCULATE SUBGRADE ELEVATIONS.
3. THE CONTRACTOR SHALL MAINTAIN A SURVEY GRID OF NOT LESS THAN 100' X 100' OR OTHER MEANS ACCEPTABLE TO THE OWNER'S REPRESENTATIVE THAT WILL INDICATE LOCATION AND AMOUNT OF CUT OR FILLS REMAINING. AT SUBGRADE THIS GRID SHALL BE 50' X 50' WITH LOCATION AND FINAL GRADE MARKED CLEARLY OR SURVEY SHALL BE COMPLETED DEMONSTRATING THAT THE SUBGRADE IS ±0.1FEET OF REQUIRED SUBGRADE.
4. UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE CONTRACT DOCUMENTS THE CONTRACTOR SHALL RETAIN AND PAY ALL COST FOR SOIL COMPACTION TESTING TO BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY. TESTING FOR COMPACTION SHALL BE DONE EVERY 2000 SQ. FT. EACH LIFT. IN TRENCHES COMPACTION TESTING SHALL BE DONE EVERY 100 LF. EVERY OTHER LIFT, BUT NOT LESS THAN 1 TEST EVERY OTHER LIFT.
5. COMPACTION REQUIREMENTS SHALL BE THOSE OUTLINED IN THE SOILS REPORT. IF THE SOILS REPORT IS NOT CLEAR OR DOES NOT GIVE REQUIREMENTS THE FOLLOWING WILL BE USED. UNDER AND TO 20 FEET OUTSIDE THE BUILDING ENVELOPE THE SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM D1557 (MODIFIED PROCTOR). UNDER PROPOSED OR FUTURE PAVEMENT AREAS INCLUDING 10 FEET OUTSIDE SUCH AREAS THE SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM D1557 (MODIFIED PROCTOR). ALL LANDSCAPE AND LAWN AREAS SHALL BE COMPACTED TO 90% MAXIMUM DRY DENSITY PER ASTM D1557 (MODIFIED PROCTOR). THE TESTING LAB SHALL TEST SOILS IN ACCORDANCE WITH ASTM D2922 (NUCLEAR METHOD) WITH PROCTORS FOR EACH SOIL TYPE.
6. UNLESS OTHERWISE NOTED IN THE SOILS REPORT OR ON THE DRAWINGS THE ON SITE MATERIAL SHALL BE USED TO MAKE FILLS. ALL MATERIAL TO BE USED FOR FILL SHALL BE FREE OF ORGANICS, FROZEN MATERIAL, CONTAMINATED MATERIAL, DEBRIS AND ANY ROCKS LARGER THAN 4 INCHES. FOR FILL PLACED WITHIN 1 FOOT OF SUBGRADE NO ROCK SHALL BE GREATER THAN 2 INCHES IN DIAMETER. THE CONTRACTOR SHALL BEAR ALL COST ASSOCIATED WITH DRYING, SEGREGATING OR OTHER REQUIRED METHODS TO TREAT SOILS TO MEET COMPACTION AND OTHER REQUIREMENTS.
7. FILLS SHALL BE PLACED IN LIFTS NOT TO EXCEED 1 FOOT IN MASS FILLS AND 8 INCHES IN TRENCH OR RESTRICTED AREAS.
8. IF IMPORTED MATERIAL IS REQUIRED THE SOURCE AND A RANDOM COMPOSITE SAMPLE SHALL BE REVIEWED BY THE TESTING LABORATORY PRIOR TO BEING BROUGHT TO SITE. IMPORTED MATERIAL SHALL HAVE 100% PASSING THE 3 INCH SIEVE FOR FILL UP TO 1 FOOT OF SUBGRADE AND 100% PASSING THE 2 INCH SIEVE FOR FILLS WITHIN 1 FOOT OF SUBGRADE. THE IMPORTED MATERIAL SHALL HAVE NO MORE THAN 40% PASSING THE NO. 40 SIEVE AND 15% PASSING THE NO. 200 SIEVE. WAIVERS TO THESE REQUIREMENTS ONLY BE GIVEN JOINTLY BY THE OWNER AND THE GEOTECHNICAL ENGINEER THAT PREPARED THE SOILS REPORT.
9. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EARTHWORK OPERATIONS FROM WEATHER AND GROUND WATER INCLUDING KEEPING POSITIVE DRAINAGE, DIVERT DRAINAGE, DEWATERING, AND SEALING DISTURBED AREAS WITH A STEEL DRUM ROLLER PRIOR TO INCLEMENT WEATHER.
10. PRIOR TO PLACEMENT OF FILLS THE AREA SHALL BE PROOF ROLLED WITH A 10 TON ROLLER OR A LOADED 10 WHEEL DUMP TRUCK. SOFT AREAS SHALL BE SCARIFIED, DRIED, AND RECOMPACTED PRIOR TO FILL BEING PLACED. RETEST BY PROOF ROLL AS NECESSARY.
11. ALL FINAL SUBGRADE UNDER PROPOSED PAVEMENT, BUILDING OR OTHER STRUCTURE SHALL BE PROOF ROLLED AS DESCRIBED ABOVE FOR IDENTIFYING OF SOFT AREAS. AREAS FOUND TO BE UNACCEPTABLE SHALL BE SCARIFIED, DRIED, AND RECOMPACTED. RETEST BY PROOF ROLL AS NECESSARY.
12. TRENCH EXCAVATION REQUIRING SHEETING, SHORING, OR OTHER STABILIZING DEVICES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER AND MEET ALL O.S.H.A. REQUIREMENTS. ALL EXCAVATIONS SHALL MAINTAIN SAFE SIDE SLOPES IN ACCORDANCE WITH LOCAL, STATE, AND O.S.H.A. REQUIREMENTS. NO STOCKING OF MATERIAL CLOSE TO AN OPEN CUT OR STEEP SLOPE WILL BE PERMITTED IN AN EFFORT TO PREVENT CAVE-INS.
13. TRENCH EXCAVATIONS SHALL BE MADE UNIFORM AND STRAIGHT TO THE FOLLOWING WIDTHS: (FOR PIPES 36 INCHES OR LESS THE TRENCH WIDTH SHALL BE THE DIAMETER PLUS 2 FEET), (FOR PIPES 36 INCHES OR GREATER THE WIDTH SHALL BE THE DIAMETER PLUS 3 FEET). ADDITIONAL WIDTH WILL ONLY BE ALLOWED WHEN COMPACTION EQUIPMENT LIMITATIONS REQUIRE AND ONLY AFTER APPROVAL OF THE ENGINEER. NO MORE TRENCH SHALL BE OPEN IN ONE DAY THAN CAN BE PROPERLY BACKFILLED IN THAT SAME DAY TO MINIMIZE WEATHER AND SAFETY CONCERNS. WHEN BACKFILLING AROUND PIPES PROVIDE UNIFORM SUPPORT AT INVERT AND PROPER COMPACTION UNDER, ALONG AND OVER THE PIPE. CARE SHALL BE GIVEN WHILE BACKFILLING AROUND PIPES TO PREVENT DAMAGE TO THE PIPES INCLUDING PLACING BACKFILL/BEDDING BY HAND, USING HAND OPERATED PLATE TAMPS OR JUMPING JACKS AND OTHER LOAD RESTRICTIVE TECHNIQUES UNTIL FILLS ARE A MINIMUM OF 2 FEET, OR MANUFACTURER'S RECOMMEND DEPTH, WHICHEVER IS GREATER, ABOVE THE TOP OF THE PIPE. COMPACTION REQUIREMENTS ARE NOT RELIEVED IN THESE AREAS AND WILL REMAIN AS STATED ON THE DRAWINGS OR ABOVE.
14. IF ROCK IS ENCOUNTERED THAT WAS NOT INDICATED ON THE PLANS OR SOILS REPORT, THE AREA FOR REMOVAL SHOULD BE MEASURED AND REVIEWED WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROCK REMOVAL. ROCK WILL BE DEFINED AS THE NATURAL EARTH MATERIALS THAT CAN NOT BE REMOVED WITH CONVENTIONAL EARTH WORKING EQUIPMENT.
15. WHERE ROCK IS ADJACENT TO A STRUCTURE OR UTILITY THE ROCK SHALL BE REMOVED TO A MINIMUM OF 6 INCHES BELOW AND 1 TIMES THE DIAMETER BUT NOT LESS THAN 1 FOOT OR GREATER THAN 3 FEET ON ANY SIDE OF THE UTILITY OR STRUCTURE.
16. NO EXPLOSIVES WILL BE ALLOWED UNTIL ALL PERMITS ARE GRANTED AND THE OWNER HAS SIGNED OFF. PRE AND POST BLAST REPORTS MUST BE KEPT AND RECORDED. ALL STRUCTURES WITHIN THE AREA OF THE BLAST MUST RECEIVE A PRE-BLAST SURVEY. ALL BLASTING MUST BE PERFORMED BY A LICENSED BLASTER.
17. UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL REMOVE ALL EXCESS TOPSOIL, CUT MATERIAL OR WASTE FROM SITE AND DISPOSE OF IN A LEGAL MANNER.

EROSION CONTROL

1. PRIOR TO CONSTRUCTION EQUIPMENT ENTERING OR EXITING THE SITE, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE BUILT UNLESS EXISTING CONDITIONS PREVENT ANY TRACKING OF DIRT, MUD, OR DEBRIS OFF THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE TO KEEP ALL ROADS, PARKING LOTS, SIDEWALKS AND ADJACENT PROPERTIES FREE OF DIRT, MUD OR OTHER DEBRIS. THIS WILL INCLUDE BUILDING THE CONSTRUCTION ENTRANCE, SWEEPING, SCRAPING AND WASHING THE PAVEMENT SURFACES WHENEVER NEEDED. THE CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS. IF A DETAIL IS NOT PROVIDED CONSTRUCT THE ENTRANCE WITH CLEAN 2 TO 3 INCH STONE, 6 INCHES THICK, OVER STABILIZING FABRIC TO THE DIMENSIONS OF 12 FEET WIDE (MINIMUM), BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS, AND 50 LONG. WIDTH SHALL BE 24 FEET IF SINGLE ENTRANCE TO SITE. LENGTH IS REDUCED TO 30 FEET IF FOR A SINGLE RESIDENCE. THE ENTRANCE SHOULD BE LOCATED SO THAT ALL VEHICLES LEAVING THE SITE WILL UTILIZE IT.
2. ALL EROSION CONTROL DEVICES SHALL BE PLACED AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH FEDERAL, STATE, LOCAL AND MANUFACTURES RECOMMENDATIONS. THE CONTRACTOR SHALL PLACE AND MAINTAIN ALL EROSION CONTROL DEVICES AS NEEDED THROUGHOUT THE PROJECT.
3. SILT FENCE SHALL HAVE HARD WOOD STAKES 2X2 INCH AND 4 FEET LONG WOVEN INTO THE FABRIC. THE BASE OF THE SILT FENCE SHALL BE EXCAVATED SO AS TO PROVIDE AN AREA TO BURY THE BOTTOM OF THE FABRIC AT LEAST 6 INCHES INTO THE GROUND. THE STAKES SHALL BE DRIVEN TO A DEPTH THAT WILL PLACE THE BOTTOM FABRIC AT THE BOTTOM OF THE TRENCH. THEN BACKFILL THE BOTTOM FABRIC ON THE UPSTREAM SIDE WITH THE MATERIAL THAT WAS EXCAVATED.
4. SILT FENCE SHALL BE PLACED WHEREVER SURFACE DRAINAGE CAN LEAVE THE SITE.
5. STONE FILTERS SHALL BE PLACED IN ALL DRAINAGE WAYS BUT NOT IN STREAMS, CREEKS OR RIVERS. STONE FILTERS SHALL CONSIST OF A UNIFORM MIX OF 1/4 TO 3/4 INCH CLEAN STONE WRAPPED IN FILTER FABRIC AND COVERED WITH 4 INCH STONE.
6. SEDIMENT TRAPS SHALL BE PLACED AND MAINTAINED AS NEEDED. THEY SHALL BE SIZED TO PROVIDE ADEQUATE STORAGE TO ALLOW SEDIMENT TO PRECIPITATE OUT PRIOR DISCHARGING DOWN STREAM.
7. TEMPORARY SEEDING SHALL CONSIST OF LIME @ 1/2 TON PER ACRE, FERTILIZER 5-10-10 @ 600 POUNDS PER ACRE, RYEGRASS (ANNUAL OR PERENNIAL) @ 40 POUNDS PER ACRE AND STRAW MULCH @ 2 TON PER ACRE. JUTE MESH SHALL BE PLACED OVER MULCH AND STAKED WHENEVER WINDS OR SLOPE WILL CAUSE THE MULCH AND SEED TO BECOME DEPLETED OR ERODED. AREAS SHALL BE TEMPORARY SEEDED WHEN THEY ARE SUBJECT TO EROSION AND WILL LIE DORMANT FOR A MONTH OR MORE.

WATER SYSTEMS AND SERVICES

1. THE WATER SYSTEMS AND SERVICES SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
2. ALL WATER PIPING, FITTINGS AND APPURTENANCES SHALL BE PLACED A MINIMUM OF 6 INCHES BELOW FROST LINE OR 5 FEET WHICHEVER IS GREATER.
3. THE MINIMUM SEPARATION BETWEEN WATER SERVICES AND SEWER LINES SHALL BE 18 INCHES MEASURED VERTICALLY FROM OUTSIDE TO OUTSIDE OF PIPE AT THE CROSSING. A STANDARD LENGTH OF WATER PIPE SHALL BE CENTERED AT THE CROSSING TO MAXIMIZE THE DISTANCE BETWEEN THE CROSSING AND THE NEAREST WATER SERVICE PIPE JOINT. WHEN THE WATER SERVICE RUNS UNDER THE SEWER LINE A GRAVEL OR CRUSHED STONE BACKFILL MEETING THE REQUIREMENTS OF SUBBASE SHALL BE PLACED AND COMPACTED AROUND THE WATER PIPE UP HALF THE DIAMETER OF THE SEWER PIPE TO PROVIDE ADEQUATE SUPPORT TO THE SEWER LINE. WATER SERVICES AND SEWER LINES RUNNING PARALLEL SHALL HAVE A MINIMUM SEPARATION OF 10 FEET MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. C900 PVC PIPE SHALL BE FURNISHED IN ACCORDANCE WITH AWWA C900 AND ASTM STANDARDS.
5. CURB STOPS SHALL HAVE A BRONZE BODY, GROUND KEY PLUG OR BALL WITH WIDE TEE HEAD. THE CURB STOP SHALL BE COMPATIBLE WITH ADJOINING PIPES. THE SERVICE BOX SHALL HAVE A TELESCOPING TOP SECTION WITH A LENGTH THAT WILL PLACE THE ADJUSTMENT CENTERED WHEN BURIED TO THE APPROPRIATE DEPTH. THE SERVICE BOX SHALL BE OF A SIZE AND TYPE THAT IS COMPATIBLE WITH THE CURB STOP. THE COVER SHALL HAVE THE LETTERING "WATER".
6. PVC SHALL BE PLACED PER MANUFACTURES RECOMMENDATIONS AND EMBEDDED IN SAND ENCASEMENTS MEASURED FROM OUTSIDE SURFACE OF THE PIPE TO THE OUTSIDE OF SAND ENCASEMENT. THE SAND SHALL BE WELL GRADED WITH 3/4" MAX. PARTICLE SIZE AND NOT MORE THAN 10% PASSING THE NO. 200 SIEVE.
7. ALL BEDDING AND ENCASEMENTS SHALL BE COMPACTED WITH CARE TO ACHIEVE PROPER COMPACTION WITHOUT DAMAGING THE PIPE, FITTINGS, OR APPURTENANCES.
8. ALL MAIN LINES AND APPROPRIATE APPURTENANCES SHALL BE FLUSHED AND DISINFECTED IN ACCORDANCE WITH AWWA C651 AND THE REQUIREMENTS OF THE APPROPRIATE HEALTH DEPARTMENT.
9. THE CONTRACTOR WILL COORDINATE ALL TESTING AND DISINFECTING WITH THE HEALTH DEPARTMENT. IF PROFESSIONAL ENGINEER CERTIFICATION IS REQUIRED THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AT LEAST TEN DAYS PRIOR TO THE START OF WORK.
10. FAILURE OF ANY TESTING SHALL REQUIRE THE CONTRACTOR TO REPAIR OR REPLACE THE FAILED SECTION AT NO ADDITIONAL EXPENSE TO THE CONTRACT.

STORM WATER SYSTEM

1. THE STORM WATER SYSTEM SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
2. STORM DESIGN INCLUDES MANY VARIABLES SUCH AS PIPE ROUGHNESS COEFFICIENT THAT CAN EFFECT THE ACTUAL FINAL RUN-OFF. IF NO ALTERNATIVE MATERIALS ARE LISTED ON THE UTILITY DRAWINGS NO SUBSTITUTIONS MAY BE MADE BY THE CONTRACTOR UNLESS FIRST REVIEWED AND ACCEPTED BY THE ENGINEER.
3. ALL STORM MATERIAL SIZES, TYPES AND SPECIFICS ARE LISTED ON THE DRAWINGS. IF THE PLANS DO NOT LIST ALL INFORMATION OR ARE UNCLEAR USE THE FOLLOWING.
4. CORRUGATED POLYETHYLENE PIPE (HDPE) SHALL BE IN ACCORDANCE WITH AASHTO M252 AND M294 AND ASTM F405 & F667 WITH A MANNING FRICTION NUMBER (N) OF 0.011 OR LESS. UNLESS SOILS ARE CONSISTENTLY SAND OR SAND AND GRAVEL WITH NOT MORE THAN 15% PASSING THE 200 SIEVE AND 100% PASSING THE 2 INCH SIEVE THE PIPE WILL BE ENCASED IN TYPE 1 GRANULAR FILL FROM 6 INCHES BELOW TO 12 INCHES ABOVE THE OUTSIDE OF PIPE. INSTALL IN ACCORDANCE WITH ASTM F449 AND THE MANUFACTURES RECOMMENDATIONS. TYPE 1 FILL GRADATION REQUIREMENTS ARE:

SIEVE DESIGNATION	% BY WEIGHT PASSING SQUARE MESH SIEVES
3"	100
2"	90-100
1/4"	30-65
#40	5-40
#200	0-10

5. CONCRETE PIPE SHALL BE REINFORCED. PIPE 18" IN DIAMETER OR LESS SHALL BE OF THE BELL AND SPIGOT TYPE. PIPE OVER 18" IN DIAMETER SHALL BE OF THE TONGUE AND GROOVE TYPE (SLIP JOINT). NO PIPE SHALL BE LESS THAN 15" IN DIAMETER.
6. END SECTIONS SHALL BE THE SAME MATERIAL AS THE PRECEDING PIPE WITH APPROPRIATE COLLAR.
7. MANHOLES (MH) AND CATCH BASINS (CB) SHALL BE PROVIDED PER ASTM C478 WITH STEEL CORE POLYETHYLENE STEPS. SIZE TO BE A MINIMUM OF 2 FOOT GREATER THAN THE LARGEST DIAMETER PIPE ENTERING OR EXITING. INCREASE SIZE IF IN THE SAME HORIZONTAL PLANE THERE IS TWO SUPPORTING AREAS BETWEEN PIPES THAT IS LESS THAN 8 INCHES OR THE CIRCUMFERENCE IS SUPPORTED BY LESS THAN 1/2 OF THE DIAMETER OF THE MH OR CB. INVERTS SHALL BE SMOOTH CAST IN PLACE CONCRETE UNLESS SUMPS ARE INDICATED ON THE DETAILS. UNLESS OTHERWISE INDICATED 4 INCH WEEPS COVERED WITH FILTER FABRIC AND 2 INCH STONE SHALL BE PROVIDED AT THE CROWN OF PIPES AND AT SUBGRADE ELEVATION. GASKETS BETWEEN RISERS SHALL BE RUBBER PER ASTM C443.
8. DROP INLETS SHALL BE PRECAST REINFORCED CONCRETE UNIT WITH INTEGRAL PRECAST BASE.
9. FRAMES AND GRATES AND COVERS SHALL BE GRAY IRON MATERIAL, MEETING ASTM A48-83 CLASS 30B WITH A TENSILE STRENGTH OF 30,000PSI. CASTINGS TO BE FULLY COATED.
10. CLEANOUTS SHALL BE MADE OF THE SAME PIPE MATERIAL AS THE CARRIER PIPE. A CAST IRON FRAME AND COVER SHALL BE PROVIDED FOR ACCESS AT GRADE AND DESIGNED FOR H-20 LOADING. THE CLEANOUT SHALL BE ENCASED IN SAND OF THE SAME TYPE AS THE PIPE BEDDING FOR THE FULL DEPTH OF THE CLEANOUT
11. PERFORATED STORM PIPE SHALL BE POLYETHYLENE PIPE WITH ALL THE REQUIREMENTS LISTED ABOVE EXCEPT THAT IT IS NOT REQUIRED TO BE SMOOTH-LINED. OR PERFORATED STORM PIPE MAY BE POLYVINYL CHLORIDE (PVC) MEETING THE REQUIREMENTS LISTED ABOVE BOTH PERFORATED THE ENTIRE LENGTH OF THE PIPE SECTION. THE PIPE SHALL BE ENCASED IN A MIX OF 1 INCH AND 2 INCH STONE AND WRAPPED IN FILTER FABRIC. IN CLEAN GRAVELS THE FILTER FABRIC SHOULD BE REMOVED UNDER THE PIPE.
12. DRY WELLS SHALL MEET THE SAME REQUIREMENTS AS THOSE LISTED FOR MANHOLES WITH THE ADDITION OF OPENINGS OF APPROXIMATELY 15% OF THE RINGS INTERIOR SURFACE. THE OPENINGS SHALL BE 1 X 3 INCH SLOTS OR 1.75 INCH DIAMETER ON THE INSIDE SURFACE. DRY WELLS SHALL BE BACKFILLED WITH A MINIMUM OF 2 FEET OF CLEAN COMPACTED NYSDOT #2 CRUSHED STONE.
13. TRENCH DRAINS UNLESS OTHERWISE NOTED SHALL BE MADE WITH 4 INCH PERFORATED CORRUGATED POLYETHYLENE PIPE ENCASED IN CLEAN STONE SIZED BETWEEN 2 INCH AND 1/4 INCH AND THEN WRAPPED IN FILTER FABRIC. OUTSIDE DIMENSIONS OF THE TRENCH DRAIN WILL NOT BE LESS THAN 1 FOOT.
14. RIP RAP SHALL BE PLACED AT THE END OF ALL OUTFALL STRUCTURES. THE RIP RAP UNLESS OTHERWISE NOTED SHALL BE A CLEAN DURABLE STONE WITH AVERAGE WEIGHTS OF 100 POUNDS. THE RIP RAP SHALL BE PLACED ON 1 FOOT OF GRAVEL SUBBASE OR STABILIZING FABRIC.
15. ALL JOINTS BETWEEN PIPES AND PRECAST STRUCTURES SHALL BE MORTARED TIGHT.
16. ALL PIPE SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURES RECOMMENDATION AND TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. CARE SHALL BE GIVEN DURING BACKFILL OPERATIONS NOT TO MOVE OR DAMAGE PIPE OR APPURTENANCES WHILE ACHIEVING THE APPROPRIATE COMPACTION REQUIREMENTS.
17. ALL SYSTEMS SHALL BE VISUALLY INSPECTED FOR ALIGNMENT AND WORKMANSHIP. ALL DEBRIS, DIRT OR OTHER FOREIGN OBJECTS SHALL BE REMOVED AND THE SYSTEM FLUSHED CLEAN.
18. ANY PIPES FOUND WITH DIAMETER DEFLECTIONS GREATER THAN 5% OF THE SPECIFIED PIPE DIAMETER WILL BE REPAIRED OR REPLACED. ANY ALIGNMENT DIFFERENTIALS GREATER THAN 5% OF THE DIAMETER OF THE PIPE WILL BE CORRECTED OR REPLACED.
19. ANY CLEANING, REPAIRS OR REPLACEMENT REQUIRED DUE TO FAILURE OF TESTING OR POOR WORKMANSHIP SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE CONTRACT.

SANITARY SEWER SYSTEMS

1. THE SANITARY SEWER SYSTEM SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE LOCAL SANITARY SEWER AUTHORITY FOR THIS PROJECT IS THE CITY OF ONEONTA.
2. ALL SANITARY SEWER MATERIAL SIZES, TYPES AND SPECIFICS ARE LISTED ON THE DRAWINGS. IF THE PLANS DO NOT LIST ALL INFORMATION OR ARE UNCLEAR USE THE FOLLOWING.
3. UNLESS OTHERWISE NOTED SANITARY PIPE AND FITTINGS SHALL BE POLYVINYL CHLORIDE (PVC) PER ASTM D3034, SDR 35, WITH GASKETS PER ASTM D3212, ELASTOMERIC SEAL. THE PIPE SHALL BE BED 6 INCHES BELOW AND 12 INCHES ABOVE WITH 1/2" – 3/4" CRUSHED STONE, CRUSHED GRAVEL, OR PEA GRAVEL.
4. CLEANOUTS SHALL BE MADE OF THE SAME PIPE MATERIAL AS THE CARRIER PIPE. A CAST IRON FRAME AND COVER SHALL BE PROVIDED FOR ACCESS AT GRADE AND DESIGNED FOR H-20 LOADING. THE CLEANOUT SHALL BE ENCASED IN STONE OF THE SAME TYPE AS THE PIPE BEDDING FOR THE FULL DEPTH OF THE CLEANOUT. CLEANOUTS SHOULD BE NO MORE THAN 90 FEET APART ON LATERALS.
5. ALL PIPE SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURES RECOMMENDATION AND TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. CARE SHALL BE GIVEN DURING BACKFILL OPERATIONS NOT TO MOVE OR DAMAGE PIPE OR APPURTENANCES WHILE ACHIEVING THE APPROPRIATE COMPACTION REQUIREMENTS.
6. ALL SYSTEMS SHALL BE VISUALLY INSPECTED FOR ALIGNMENT AND WORKMANSHIP. ALL DEBRIS, DIRT OR OTHER FOREIGN OBJECTS SHALL BE REMOVED AND THE SYSTEM FLUSHED CLEAN
7. ALL TAPS TO MAIN LINES SHALL BE MADE WITH SADDLES WHEN THE TAP IS 1/2 THE DIAMETER OR LESS OF THE EXISTING PIPE BUT MADE WITH A SLEEVE WHEN THE TAP IS GREATER THAN 1/2 THE DIAMETER OR EQUAL TO THE EXISTING PIPE. IF CONNECTIONS ARE REQUIRED TO EQUAL SIZE PIPES OF 8 INCHES OR GREATER A MANHOLE SHOULD BE INSTALLED OVER THE CONNECTION POINT AND INVERTS FORMED. WHEN CONNECTING TO AN EXISTING MANHOLE THE CONNECTING PIPE HOLE SHALL BE CORED AND A PRESS WEDGE INSTALLED. THE CONNECTION SHALL BE MORTARED UP WITH WATERPROOF/PLUG MORTAR. INSIDE THE EXISTING MANHOLE THE EXISTING INVERT SHALL BE BROKE OUT IN A MANNER THAT PROTECTS FROM DEBRIS ENTERING THE LIVE SYSTEM, WHILE A NEW INVERT IS FORMED.
8. THE CONTRACTOR SHALL PROVIDE ANY TESTING REQUIRED BY THE AUTHORITY HAVING JURISDICTION INCLUDING INSPECTION.
9. ANY WORK WITHIN THE NYSDOT RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE PERMIT ISSUED BY NYSDOT.

PAVEMENT AND STRUCTURAL SUBBASE

1. THE TYPE OF SUBBASE REQUIRED FOR EACH USE SHALL BE CALLED OUT ON THE DRAWINGS. IF NO REFERENCE IS MADE ON THE DRAWINGS OR DETAILS TO THE TYPE OF SUBBASE REQUIRED THE FOLLOWING SHALL BE USED. THE SOURCE OF THE MATERIAL SHALL BE ONE APPROVED FOR USE BY THE APPLICABLE STATE'S "DEPARTMENT OF TRANSPORTATION". THE MATERIAL SHALL BE A CRUSHED STONE CONFORMING TO AASHTO M147-65 (1980 OR LATEST REVISION), GRADE A. GRAVEL OR OTHER MATERIALS CAN ONLY BE SUBSTITUTED FOR CRUSHED STONE WHEN APPROVED IN WRITING BY THE OWNER AND ENGINEER. MATERIAL SUPPLIED FOR USE AS SUBBASE SHALL HAVE 100% PASSING THE 2 INCH SIEVE, 30% TO 65% PASSING THE 3/8 INCH SIEVE, 25% TO 55% PASSING THE NO. 4 SIEVE, 15% TO 40% PASSING THE NO. 40 SIEVE AND 2% TO 10% PASSING THE NO. 200 SIEVE.
2. SUBBASE SHALL BE PLACED IN LIFTS NOT TO EXCEED 12 INCHES AND COMPACTED TO THE REQUIREMENTS STATED IN THE SOILS REPORT. IF NOT STATED THE COMPACTION REQUIREMENT SHALL BE 95% OF MAXIMUM DRY DENSITY PER ASTM D1557 (MODIFIED PROCTOR).
3. FINAL GRADING OF SUBBASE SHALL BE TO ±1 INCH OF THAT DESIGNATED ON THE DRAWINGS AND ±1 INCH OF THE REQUIRED THICKNESS FOR THICKNESS OF 8 INCHES OR GREATER AND ± 1/2 INCH FOR THICKNESS LESS THAN 8 INCHES.
4. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS IN PREPARING THE SUBGRADE TO RECEIVE SUBBASE. THIS SHALL INCLUDE FINE GRADING AND COMPACTING AS NECESSARY TO MEET THE REQUIREMENTS STATED HERE AND UNDER EARTHWORK.
5. THE AMOUNT OF TESTING REQUIRED TO VERIFY THE COMPACTION SHALL BE THE SAME AS STATED UNDER EARTHWORK.

CONCRETE CURB, SIDEWALKS AND GUTTERS

1. THE DIMENSIONS SHALL BE THOSE SHOWN ON THE DRAWINGS. THE CONCRETE MIX SHALL BE 4500 PSI AT 28 DAYS MADE WITH TYPE I OR TYPE II CEMENT PER ASTM C150 AND AGGREGATES MEETING STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS. SLUMP FOR SLIP FORMING SHALL BE 1 INCH ± 1/2 INCH AND FOR FORMED CONCRETE THE SLUMP SHALL BE 3 INCH ± 1 INCH. AIR ENTRAINING MIXTURE SHALL MEET THE REQUIREMENTS OF ASTM C260 4% ± 1-1/2% FOR SLIP FORM WORK AND 6% ± 1 1/2% FOR FORMED AND PLACED CONCRETE. WATER REDUCING AGENT SHALL CONFORM TO ASTM C 494, TYPE A. CURING COMPOUNDS SHALL CONFORM WITH ASTM C309, TYPE I, CLASS A MOISTURE LOSS OF NOT MORE THAN 0.055 GR/SQ CM WHEN APPLIED AT 200 SQ FT PER GALLON.
2. SIDEWALKS, GUTTERS AND CURBS SHALL BE PLACED ON COMPACTED SUBBASE CONSISTENT WITH THE PAVEMENT SUBBASE AS SHOWN ON THE DRAWINGS. WHEN SUBBASE DETAILS ARE MISSING AND NO AGENCY HAS JURISDICTION USE THE FOLLOWING: SIDEWALKS AND GUTTERS SHALL BE PLACED ON A MINIMUM OF 6 INCHES OF COMPACTED SUBBASE AND CURBS SHALL BE PLACED ON A MINIMUM OF 4 INCHES OF COMPACTED SUBBASE.
3. ALL FORMING, PLACEMENT, MATERIALS AND CURING SHALL CONFORM TO THE LATEST ADDITION OF ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ALL SIMILAR STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
4. REINFORCING SHALL BE IN ACCORDANCE WITH THAT SPECIFIED ON THE DRAWINGS AND THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICES". REINFORCING STEEL SHALL BE ASTM A615, GRADE 60, DEFORMED. WELDED WIRE FABRIC SHALL BE ASTM A185, WELDED WIRE STEEL FABRIC.
5. SIDEWALKS, AND GUTTERS SHALL HAVE A BROOM FINISH PERPENDICULAR TO FLOW WITH A PICTURE FRAME EDGE JOINT ALL THE WAY AROUND. CURBS SHALL HAVE A SMOOTH FINISH OR LIGHT RUB FINISH BUT CONSISTENT THROUGH OUT THE PROJECT.
6. EXPANSION JOINTS SHALL BE PLACED EVERY 50 FEET AND AT ADJOINING STRUCTURES SUCH AS WALLS, MANHOLES AND VAULTS. EXPANSION JOINT MATERIAL SHALL BE PREMOLDED, 1/2 INCH MATERIAL WITH 23/64 INCH CAP IN ACCORDANCE WITH ASST. D1751. AFTER CONCRETE HAS SET THE CAP SHOULD BE REMOVED AND VOID FILLED WITH WATERPROOF JOINT FILLER. CURB AND GUTTER SHALL BE CUT OR TOOL JOINTED TO 1/3 THE DEPTH EVERY 10 FEET. SIDEWALKS SHOULD HAVE TOOLED OR CUT JOINTS TO 1/3 THE DEPTH IN SQUARES OR AS CLOSE TO SQUARE AS POSSIBLE NOT EXCEEDING 5FTX5FT.

ASPHALT PAVEMENT

1. ASPHALT SHALL BE THE TYPE OR TYPES SPECIFIED ON THE DRAWINGS. IF NO TYPE IS INDICATED THE CONTRACTOR SHALL USE A MIX SPECIFIED BY THE APPROPRIATE STATE DEPARTMENT OF TRANSPORTATION FOR TOP AND BINDER. ALL ASPHALT SHALL BE PRODUCED IN STATE APPROVED PLANTS WITH STATE APPROVED PRODUCTS.
2. ASPHALT WILL ONLY BE PLACED WHEN THE OUTSIDE TEMPERATURE IS 45 DEGREES F AND RISING. ASPHALT WILL NEVER BE PLACED ON FROZEN MATERIAL, DURING MEDIUM OR HEAVY PRECIPITATION, OR WHEN PRECEDING PRECIPITATION HAS SATURATED THE SUBBASE AND/OR SUBGRADE.
3. SURFACES THAT WILL ABUT THE NEW ASPHALT SHALL BE TACK COATED PRIOR PLACEMENT OF ASPHALT INCLUDING CURBS, GUTTER, EXISTING ASPHALT, AND STRUCTURES. TACK COAT SHALL BE APPLIED NEATLY TO MATCH THE LINES AND GRADES OF THE PROPOSED ABUTTING ASPHALT AT A RATE OF .05 TO .15 GALLONS PER SQUARE YARD.
4. ASPHALT SHALL BE PLACED IN LAYERS EQUAL TO THOSE SPECIFIED ON THE PLANS. THICKNESS OF EACH LAYER OR THE THICKNESS OF ALL LAYERS COMBINED SHALL NOT VARY MORE THAN 1/4 INCH FOR THICKNESS OF 0 TO 4 INCHES AND 1/2 INCH FOR THICKNESS OF 4 INCHES OR GREATER, FROM THOSE SPECIFIED ON THE DRAWINGS. IF MORE THAN 60% OF TEST CORES SAMPLED FAIL TO EQUAL OR EXCEED THE REQUIRED DEPTH THE PAVEMENT SHALL BE CONSIDERED FAILED AND BE SUBJECT TO REPAIRS, REPLACEMENT OR REASONABLE COMPENSATION OF WHICH THE CONTRACTOR WILL BEAR ALL COSTS. THE ASPHALT SHALL ALSO BE TESTED FOR SMOOTHNESS BY LAYING A 16 FOOT STRAIGHT EDGE ON THE PAVEMENT AND VERIFYING THAT THERE ARE NO GAPS GREATER THAN 1/4 INCH IN ANY DIRECTION.
5. PLACEMENT AND COMPACTION REQUIREMENTS SHALL BE THE SAME AS THOSE SPECIFIED BY THE STATE DEPARTMENT OF TRANSPORTATION OF WHICH THE PROJECT IS LOCATED IN. THE ROLLING SHALL BE DONE IN SUCH A MANNER THAT WILL MATCH JOINTS AND LEAVE A SMOOTH UNIFORM SURFACE WHILE PROVIDING THE PROPER COMPACTION WHICH WILL BE 95% OF LABORATORY DENSITY.
6. WHEN MATCHING INTO EXISTING PAVEMENT ALL MATCH JOINTS SHALL BE SAW CUT TO PROVIDE A STRAIGHT SMOOTH JOINT. THE ASPHALT DEPTH AT THE MATCH POINT SHALL BE EQUAL TO THAT OF THE PROPOSED OR EXISTING WHICH EVER IS GREATER.
7. PAVING EQUIPMENT SHALL BE OF GOOD CONDITION AND QUALITY. ASPHALT SHALL BE PLACED BY MECHANICAL EQUIPMENT EXCEPT IN SMALL AREAS THAT ARE INACCESSIBLE TO A PAVER. ASPHALT SHALL BE TRANSPORTED IN COVERED TRUCKS AND SCHEDULED IN SUCH A MANNER THAT WILL MAINTAIN ASPHALT TEMPERATURE. ASPHALT SHALL BE REJECTED WHEN TEMPERATURES FALL BELOW 250 DEGREES F OR THE MINIMUM TEMPERATURES SPECIFIED BY THE STATE DEPARTMENT OF TRANSPORTATION.

SEEDING AND LANDSCAPING

1. ALL DISTURBED AREAS SHALL BE FINE GRADED REMOVING ALL ROOTS, STICKS, STONES AND DEBRIS GREATER THAN 2 INCHES IN ANY DIMENSION.
2. SEED, MULCH AND FERTILIZE AS NECESSARY TO RESTORE ALL DISTURBED AREAS TO ORIGINAL CONDITION OR BETTER.
3. LAWN FERTILIZER SHALL BE 55% NITROGEN, 10% PHOSPHORUS AND 10% POTASH WHERE 50% OF THE NITROGEN IS DERIVED FROM UREAFORM SOURCE.
4. LAWN SEED WHEN NOT GIVEN ON THE PLANS SHALL BE 50% BY WEIGHT, 85% PURITY, 85% GERMINATION OF PENNFINE PERENNIAL RYE, 30% BY WEIGHT, 97% PURITY, 85% GERMINATION OF PENNLAWN RED FESCUE, 20% BY WEIGHT, 85% PURITY, 80% GERMINATION OF COMMON KENTUCKY BLUEGRASS.
5. WHEN PLACING BY HYDROSEEDING APPLICATION SEED SHALL BE PLACED AT 80 POUNDS PER ACRE, HYDROMULCH AT 1,200 POUNDS PER ACRE, WATER AT 500 GALLONS PER ACRE AND FERTILIZER AT A MINIMUM OF 220 POUNDS PER ACRE.
6. IF PLACING BY MECHANICAL MEANS FERTILIZER SHALL BE PLACED AT 25 POUNDS PER 1,000 SQUARE FEET, SEED AT 5 POUNDS PER 1,000 SQUARE FEET AND STRAW MULCH AT 2 TONS PER ACRE. PLACE FERTILIZER AND SEED THEN LIGHTLY RAKE AND THEN ROLL WITH 200 POUND ROLLER. MULCH THE AREA THEN WATER. STRAW MAY NEED TO BE SECURE TO PREVENT IT BLOWING AWAY.
7. WATER LAWN AREAS AS NEEDED TO PROMOTE GROWTH. THE CONTRACTOR WILL BE RESPONSIBLE TO WATER, RESEED OR WHATEVER WORK NECESSARY TO INSURE THE GROWTH OF THE LAWN UNTIL A COMPLETE AND UNIFORM STAND OF GRASS HAS GROWN AND BEEN CUT AT LEAST TWICE.

TRAFFIC SIGNAGE AND PAVEMENT MARKINGS

1. PAVEMENT MARKINGS SHALL BE THE TYPE, COLOR, SIZE AND LOCATIONS SHOWN ON THE PLANS. IF THE INFORMATION ON THE PLANS IS NOT COMPLETE AND AUTHORITY HAVING JURISDICTION DOES NOT HAVE REQUIREMENTS REGARDING THIS USE THE FOLLOWING: PAINT SHALL BE SUPPLIED IN ACCORDANCE WITH AASHTO: M248 LATEST ADDITION. COLORS SHALL BE AS FOLLOWS (YELLOW-PARKING STALLS, HANDICAP PARKING AND CHARACTERS, PARKING ISLANDS, TRAFFIC CONTROL LETTERING AND CHARACTERS AND FIRE LANES) (WHITE – STOP BARS, PEDESTRIAN CROSSINGS AND STOP LETTERING).
2. THE PAVEMENT SHALL BE CLEAN AND FREE OF DIRT, DUST, MOISTURE, OILS AND OTHER FOREIGN MATERIALS. ANY OLD PAVEMENT MARKINGS SHALL BE REMOVED UNLESS PAINTS ARE COMPATIBLE AND OVERLAY IDENTICALLY. THE SURFACE OF THE PAVEMENT PRIOR APPLICATION SHALL BE 45 DEGREES FAHRENHEIT AND RISING UNLESS MANUFACTURER'S RECOMMENDATIONS ARE GREATER.
3. THE SIGNAGE SHALL BE THE TYPE AND LOCATION PER THE DRAWINGS. THE SIGNAGE SHALL BE PROVIDED IN ACCORDANCE WITH THE LOCAL HIGHWAY, COUNTY HIGHWAY AND STATE DEPARTMENT OF TRANSPORTATION. IF LOCAL, COUNTY, OR STATE CODES DO NOT EXIST USE AASHTO: M268.
4. POSTS, BRACKETS AND FRAMES SHALL BE STEEL PER ASTM A36, A242, A441, A572, A588, GRADE 50 AND HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. ALL CUTTING, DRILLING OR OTHER POLE MODIFICATIONS SHALL BE PAINTED WITH GALVANIZING PAINT. ALL BOLTS, NUTS AND WASHERS SHALL BE STAINLESS STEEL.
5. POST HOLES SHALL BE A MINIMUM OF FOUR FEET DEEP AND 12 INCHES IN DIAMETER UNLESS POOR SOILS OR FROST CONDITIONS REQUIRE GREATER DEPTH. SIGN POSTS SHALL BE KEPT PLUMB, 6 INCHES OFF BOTTOM AND CENTERED AS 3000 PSI CONCRETE IS PLACED AROUND THE POST. THE OVERALL SIGN AND POST SYSTEM SHOULD BE ABLE TO WITHSTAND 33 POUNDS PER SQUARE FOOT. POSTS MAY BE DRIVEN WHEN ACCEPTABLE TO LOCAL AUTHORITIES AND BY OWNERS REPRESENTATIVE.
6. CONTRACTOR CAN PLACE SIGNS ON POSTS AFTER CONCRETE HAS CURED FOR SEVEN DAYS OR 3/4 STRENGTH IS ACHIEVED.
7. ALL HANDICAP STRIPING AND SIGNAGE SHALL MEET AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. FIRE LANE STRIPING AND SIGNAGE SHALL MEET THE REQUIREMENTS OF THE LOCAL BUILDING INSPECTOR AND FIRE DEPARTMENT.

GEOTEXTILES

1. PROVIDE CERTIFICATIONS STATING THAT THE MATERIALS COMPLY WITH THE SPECIFIED REQUIREMENTS.
2. ALL GEOTEXTILES SHALL BE NEW, CLEAN AND IN ACCORDANCE WITH THE MATERIAL SPECIFICATIONS, UNLESS SPECIFICALLY NOTED ON THE PLANS.
3. TAKE ALL REQUIRED MEASURES TO ENSURE THAT ALL GEOTEXTILES ARE PROTECTED FROM DAMAGE.
4. SPECIAL CARE SHALL BE EXERCISED DURING DELIVERY AND STORAGE TO AVOID DAMAGE TO THE PRODUCTS.
5. ALL MATERIALS SHALL BE DELIVERED AND STORED WITHIN THE CONTRACTOR'S WORK LIMITS OR IN AN AREA APPROVED BY THE OWNER.
6. PRODUCTS THAT ARE DAMAGED WILL BE REMOVED AND REPLACED, UNLESS THE PRODUCT CAN BE REPAIRED IN AN ACCEPTABLE MANNER.
7. FILTER FABRIC SHALL BE A NON-WOVEN GEOTEXTILE AND MEET THE FOLLOWING REQUIREMENTS:

PROPERTY	
WEIGHT	4.0 OZ/SY.
GRAB STRENGTH	105 LBS.
GRAB ELONGATION	50 %
TRAPEZOID TEAR STRENGTH	45 LBS.
MULLEN BURST STRENGTH	210 PSI
PUNCTURE STRENGTH	65 LBS.
THICKNESS	60 MILS
WATER FLOW RATE	140 GPM/FT SQ.

8. THE SEPARATION/STABILIZATION FABRIC SHALL BE A WOVEN GEOTEXTILE AND MEET THE FOLLOWING REQUIREMENTS:

PROPERTY	
WEIGHT	4.0 OZ/SY.
GRAB STRENGTH	200 LBS.
TRAP TEAR STRENGTH	75 LBS.
MULLEN BURST STRENGTH	400 PSI
PUNCTURE STRENGTH	90 LBS.

9. THE SURFACE THE GEOTEXTILE IS TO BE PLACED ON SHALL BE SMOOTH AND FREE OF SHARP STONES TO PREVENT PUNCTURE OF THE GEOTEXTILE.
10. GEOTEXTILES MAY BE JOINED BY OVERLAPPING OR SEWING. OVERLAPPED SEAMS SHALL HAVE A MINIMUM OVERLAP OF 18 INCHES. SEWN SEAMS SHALL BE LAPPED A MINIMUM OF 4" AND SEWN WITH NYLON OR POLYPROPYLENE THREAD.
11. GEOTEXTILE THAT IS PUNCTURED OR TORN SHALL BE REPLACED OR PATCHED. A PATCH SHALL EXCEED THE DAMAGED PERIMETER BY 3 FEET IN ALL DIRECTIONS.
12. GEOTEXTILE SHALL BE PLACED LOOSELY SO THAT OVERLAPPING MATERIALS WILL NOT STRETCH OR TEAR IT.
13. GEOTEXTILES SHALL BE UNROLLED FROM TOP TO BOTTOM OF SLOPES AND OVERLAY MATERIAL SHALL BE PLACED FROM THE TOE OF THE SLOPE TOWARDS THE TOP.
14. OVERLAY MATERIAL SHALL BE PLACED IN THE DIRECTIONS OF SEAMS OR THE DIRECTION OF OVERLAPS ONLY.
15. OVERLAY MATERIALS SHALL NOT BE DROPPED ON GEOTEXTILE WHEN AVOIDABLE.
16. WHEN USED FOR UNDERDRAIN, GEOTEXTILE SHALL BE PLACED TO CONFORM LOOSELY TO THE SHAPE OF THE TRENCH. AFTER PLACING THE DRAINAGE MATERIAL, THE GEOTEXTILE SHALL BE FOLDED OVER THE TOP TO FORM A 12-INCH MINIMUM OVERLAP.
17. GEOTEXTILES SHALL BE PROTECTED FROM SUNLIGHT DURING TRANSPORT AND STORAGE. AFTER PLACEMENT, THE GEOTEXTILE SHALL NOT BE LEFT UNCOVERED FOR MORE THAN 2 WEEKS.
18. TRAFFIC OR CONSTRUCTION EQUIPMENT WILL NOT BE PERMITTED DIRECTLY ON GEOTEXTILES.

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NO.	REVISIONS AND DESCRIPTIONS	DATE:
3	RE-SUBMITTAL PACKAGE	4/26/13
2	REV. 3/26/13 CITY LETTER	4/12/13
1	REVISED TO PRELIMINARY PLAN	2/20/13

HILLSIDE COMMONS
STUDENT HOUSING

CITY OF ONEONTA
OTSEGO COUNTY, NY

SPECIFICATIONS

SHEET NO.
C300
PROJECT NO.
200.26412
DATE: 02/20/13
CAD FILE NO.: 20026412.SITE.DGN

REVISIONS		
Rev #	Date	BY:
1	2/5/13	J.P.
2	2/14/13	J.P.
3	4/16/13	J.P.
4	4/24/13	J.P.

Calculation Summary								
Label	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb
OVERALL SUMMARY	Fc	2.36	17.2	0.1	23.60	172.00	15	15

Luminaire Schedule					
WLS8905 HILLSIDE COMMONS ONEONTA, NY PM: STEVE PLEASE CALL US FOR PRICING AT 1-800-633-8711					
Symbol	Qty	Label	Lumens	LLF	Description
	3	A	60000	0.850	WLS-RVS-L-5-575-NW-PSMH-FG-V 30' POLE 2'-6'' BASE
	5	B	32000	0.800	WLS-RVS-M-3-320-NW-PSMH-FG-V 20' POLE 2'-6'' BASE
	14	C	34000	0.800	WLS-RVS-M-FF-320-NW-PSMH-FG-V-GS 20' POLE 2'-6'' BASE
	4	D	32000	0.800	WLS-RVS-M-3-320-NW-PSMH-FG-V-GS 20' POLE 2'-6'' BASE

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine applicability of the layout to existing or future field conditions.

This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps and other variable field conditions.

1919 WINDSOR PLACE
FORT WORTH, TX 76110
WWW.WLSLIGHTING.COM

WLS LIGHTING SYSTEMS

Consider the Impact!

800-633-8711

PM: STEVE | BY: J.P. | SHEET 1 OF 1

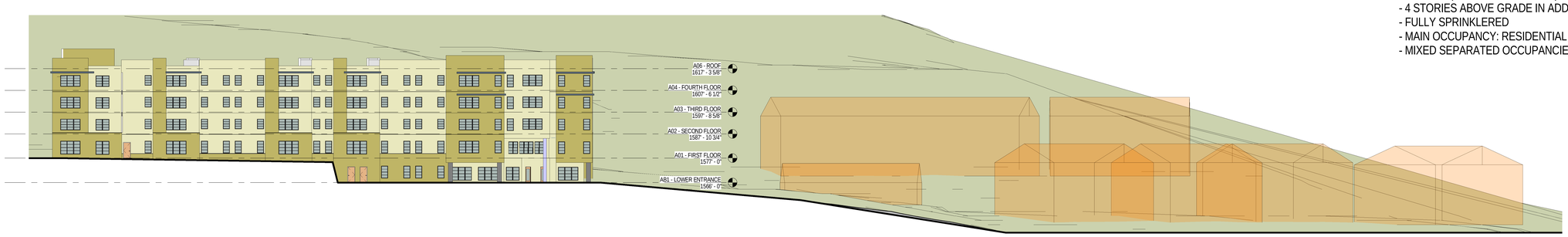
WLS-8905 | DATE - 1/31/13 | SCALE: 1"=60'

HILLSIDE COMMONS
ONEONTA, NY

SOUTH ELEVATION

WEST ELEVATION

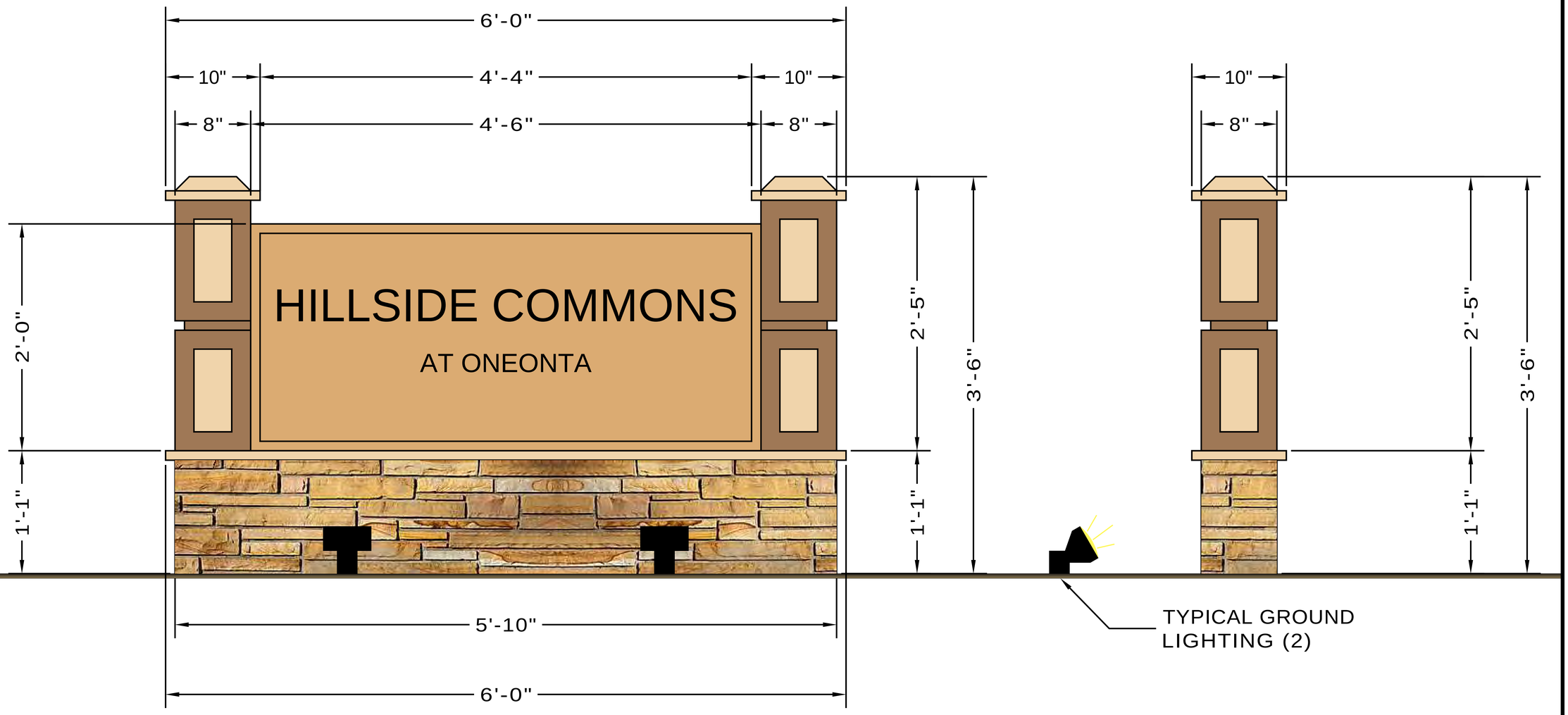
BUILDING INFORMATION:
- TYPE VA (LIGHT WOOD FRAME) CONSTRUCTION
- 4 STORIES ABOVE GRADE IN ADDITION TO BASEMENT LEVEL
- FULLY SPRINKLERED
- MAIN OCCUPANCY: RESIDENTIAL DWELLING UNITS - R2
- MIXED SEPARATED OCCUPANCIES (R, A, B)



WEST ELEVATION / SITE SECTION

NORTH ELEVATION

EAST ELEVATION



Proposed Monument Sign

Elevation

General Notes

No.	Revision/Issue	Date

HILLSIDE COMMONS
PROPOSED MONUMENT SIGN
150 BLODGETT DRIVE, ONEONTA, NY

NEWMAN DEVELOPMENT GROUP LLC
P.O. Box 678
Vestal, New York 13851
Phone: (607) 770-0155

www.newmandevelopment.com

Date	APRIL 29, 2013
Scale	3”=1’-0”
Sheet	