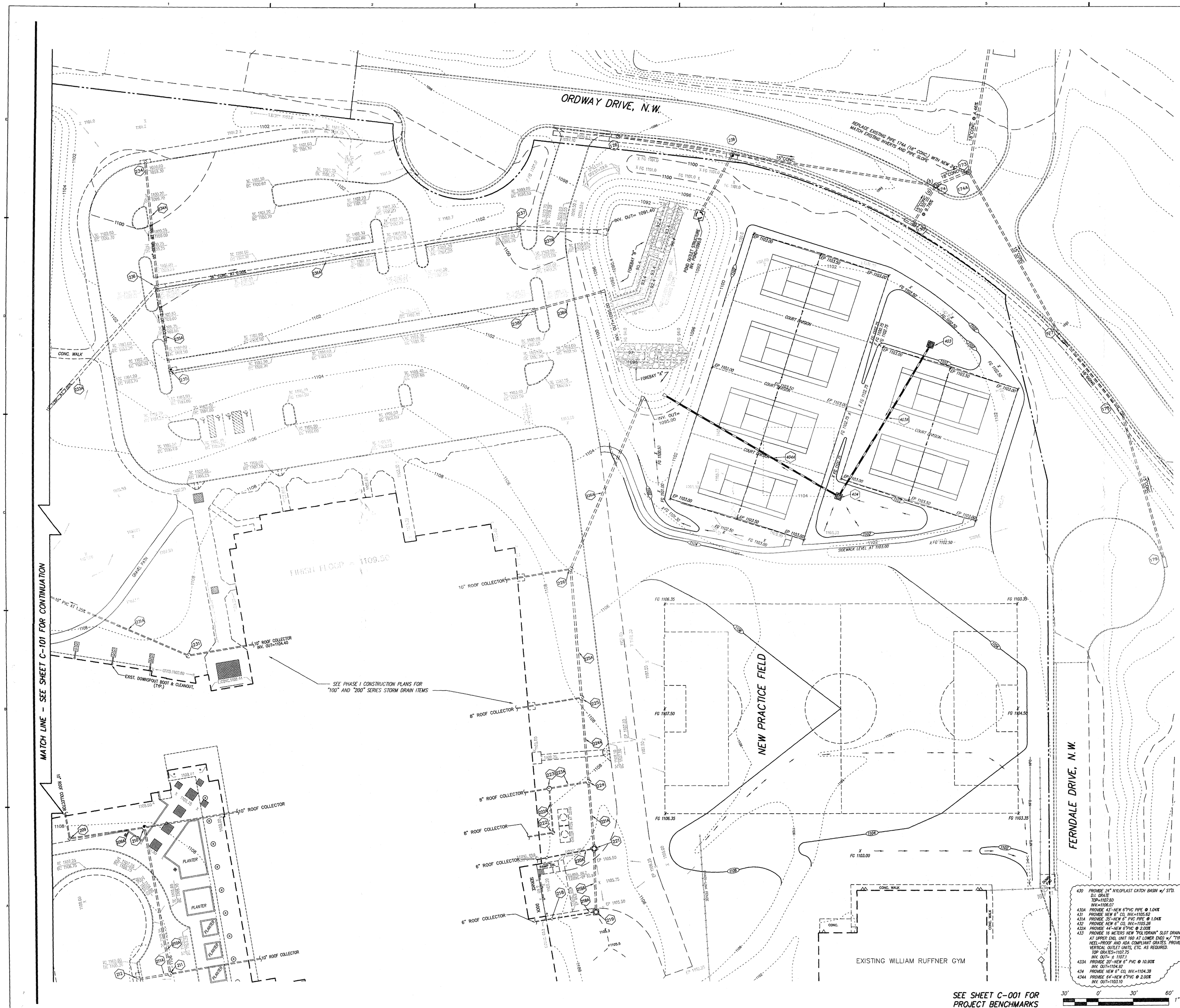

STORM DRAIN SCHEDULE

- STORM DRAIN ITEMS IN THE "100 SERIES" ARE STRUCTURES IN PLACE PRIOR TO THE COMMENCEMENT OF THIS PROJECT, AND ARE SHOWN GRAPHICALLY FOR REFERENCE ONLY (SEE C-100 FOR SCHEDULE).
- STORM DRAIN ITEMS IN THE "200" SERIES ARE TO BE IN-PLACE AT THE COMPLETION OF PHASE I CONSTRUCTION OF THE NEW SCHOOL AND PARKING, AND ARE SHOWN GRAPHICALLY FOR REFERENCE ONLY (SEE C-100 FOR SCHEDULE).
- STORM DRAIN ITEMS IN THE "400" SERIES ARE STRUCTURES THAT ARE TO BE INSTALLED IN CONJUNCTION WITH CONSTRUCTION OF PHASE II OF THE SCHOOL PROJECT, AND THE NEW ATHLETIC STADIUM.
- SEE SHEET C-300 FOR NEW STORM DRAIN PROFILES.
- ALL STORM DRAINAGE STRUCTURES SHALL BE PRE-CAST CONCRETE. MATERIALS, FABRICATION, AND INSTALLATION SHALL BE IN STRICT CONFORMANCE TO VDOT STANDARDS AND SPECIFICATIONS.
- ALL NEW STORM STRUCTURES 4' INSIDE DIAMETER AND LARGER TO RECEIVE VDOT ES-1 INLET SHAPING
- NEW CONCRETE PIPE SHALL BE MINIMUM VDOT CLASS III REINFORCED CONCRETE, UNLESS OTHERWISE SPECIFIED
- SEE SOIL EROSION CONTROL PLAN FOR PERMANENT EROSION CONTROL STONE TO BE PLACED AT PIPE OUTFALLS, AS APPLICABLE.
- ALL STORM DRAIN BEDDING AND INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH VDOT STANDARDS AND SPECIFICATIONS.
- ALL EXTERIOR STORM DRAIN CLEANOUTS SHALL BE CONSTRUCTED WITH TRAFFIC-BEARING FRAMES AND COVERS

400 PROVIDE NEW STORM MANHOLE
RIM=1111.50
INV. IN (EXIST) = 1104.92
INV. OUT = 1104.82

400A PROVIDE 241' NEW 15" RCP AT 0.80%
INV. IN = 1104.82
INV. OUT = 1102.89

401 PROVIDE NEW STORM MANHOLE
RIM=1114.00
INV. IN = 1102.89
INV. OUT = 1102.79

401A PROVIDE 242' NEW 15" RCP AT 0.80% PROVIDE VDOT ES-1 AT OUTLET (LENGTH INCLUDES ES-1)
INV. IN = 1102.79
INV. OUT = 1100.85 (AT OUTLET OF ES-1)

402A PROVIDE 72' NEW 15" RCP AT 1.00% PROVIDE 2-VDOT ES-1 AT ENDS (LENGTH INCLUDES ES-1's)
INV. IN = 1100.50 (AT INLET OF ES-1)
INV. OUT = 1099.78 (AT OUTLET OF ES-1)

229A REMOVE EXISTING ES-1, EXTEND EXISTING 30" CONC. PIPE 35' AT 0.50 & RE-INSTALL ES-1 NEW INV. IN = 1098.84 (AT INLET END ES-1)

403 PROVIDE NEW VDOT STD. DI-7 w/ TYPE III GRATE
TOP=1100.00
INV.=1097.17

403A PROVIDE 153' NEW 15" RCP AT 0.75%
INV. IN=1097.17
INV. OUT=1096.02

404 PROVIDE NEW VDOT STD. DI-7 w/ TYPE III GRATE
TOP=1100.00
INV. IN=1096.02
INV. OUT=1095.92

404A PROVIDE 171' NEW 15" RCP AT 0.50%
PROVIDE VDOT ES-1 AT OUTLET END.
INV. IN=1095.92
INV. OUT=1095.07

405 PROVIDE VDOT STD. DI-3B, L=6'
RIM = 1107.06
INV. = 1102.71

405A PROVIDE 55'-15" CONCRETE PIPE AT 0.75%
INV. IN = 1102.71
INV. OUT = 1102.30

406 PROVIDE VDOT STD. DI-1 GRATE INLET
TOP = 1107.00
INV. IN = 1101.67
INV. OUT = 1101.57

406A PROVIDE 256'-15" CONCRETE PIPE AT 0.75%
INV. IN = 1101.57
INV. OUT = 1099.66

407 PROVIDE VDOT STD. DI-3A, L=2.5'
RIM = 1107.30
INV. = 1102.60

407A PROVIDE 77' NEW 15" RCP AT 1.56%
INV. IN = 1102.60
INV. OUT = 1101.40

408 PROVIDE VDOT STD. DI-1 GRATE INLET
TOP = 1103.50
INV. = 1100.30

408A PROVIDE 129' NEW 15" RCP AT 1.55%
INV. IN = 1100.30
INV. OUT = 1098.56

409 PROVIDE VDOT STD. DI-1 GRATE INLET
TOP = 1103.50
INV. = 1100.30

409A PROVIDE 78' NEW 15" RCP AT 0.75%
INV. IN = 1100.30
INV. OUT = 1099.72

410 PROVIDE VDOT STD. DI-1 GRATE INLET
TOP = 1103.50
INV. IN (426A) = 1100.20
INV. IN (408A) = 1098.56
INV. IN (409A) = 1099.72
INV. OUT = 1098.46

410A PROVIDE 123 NEW 15" RCP AT 0.75%
INV. IN = 1098.46
INV. OUT = 1097.54

411 PROVIDE VDOT STD. DI-1 GRATE INLET
TOP = 1105.00
INV. IN (406A)= 1099.66
INV. IN (410A) = 1097.54
INV. OUT = 1097.44

411A PROVIDE 125' NEW 18" CONCRETE PIPE AT 0.75%
INV. IN = 1097.44
INV. OUT = 1096.50

412 PROVIDE VDOT STD. DI-7 W/ TYPE III GRATE
TOP = 1105.00
INV. = 1105.60

412A PROVIDE 164' NEW 15" CONCRETE PIPE AT 1.00%
INV. IN = 1101.60
INV. OUT = 1100.16

413 PROVIDE VDOT STD. STORM MANHOLE
TOP = 1109.25
INV. IN (411A)= 1096.50
INV. IN (412A) = 1100.16
INV. OUT = 1096.40

413A PROVIDE 77' NEW 24" CONCRETE PIPE AT 0.50%
INV. IN = 1096.40
INV. OUT = 1096.02

414 PROVIDE VDOT STD. DI-7 W/ TYPE III GRATE
TOP = 1105.00
INV. IN = 1096.02
INV. OUT = 1095.92

414A PROVIDE 295 NEW 24" CONCRETE PIPE AT 0.50%
INV. IN = 1095.92
INV. OUT = 1094.45

415 PROVIDE VDOT STD. STORM MANHOLE
TOP = 1107.00
INV. IN = 1094.45
INV. OUT = 1094.35

415A PROVIDE 175' NEW 24" CONCRETE PIPE AT 0.50%
INV. IN = 1094.35
INV. OUT = 1093.48

416 PROVIDE VDOT STD. STORM MANHOLE
RIM = 1104.24 (AT TOP OF BASE STONE)
INV. IN (SUB-DRAIN COLLECTOR PIPES)= 1099.33
INV. OUT = 1099.23

416A PROVIDE 53 NEW 15" CONCRETE PIPE AT 2.00%
INV. IN = 1099.23
INV. OUT = 1098.17

417 PROVIDE VDOT STD. DI-1
TOP = 1103.00
INV. IN (415A) = 1093.48
INV. IN (416A) = 1098.17
INV. OUT = 1093.38

417A PROVIDE 130' NEW 24" CONCRETE PIPE AT 0.75%
INV. IN = 1093.38
INV. OUT = 1092.41

418 PROVIDE VDOT STD. STORM MANHOLE
RIM = 1104.24 (AT TOP OF BASE STONE)
INV. IN (SUB-DRAIN COLLECTOR PIPES)= 1099.33
INV. OUT = 1099.23

418A PROVIDE 53 NEW 15" CONCRETE PIPE AT 2.00%
INV. IN = 1099.23
INV. OUT = 1098.17

419 PROVIDE VDOT STD. DI-1
TOP = 1103.00
INV. IN (417A) = 1092.41
INV. IN (418A) = 1098.17
INV. OUT = 1092.31

419A PROVIDE 283' NEW 30" CONCRETE PIPE AT 0.96%
INV. IN = 1092.31
INV. OUT = 1089.59

PROVIDE VDOT STD. ES-1 AT OUTLET END

420 PROVIDE 24" NYLOPLAST CATCH BASIN w/ STD. D.I. GRATE
TOP=1107.00
INV.=1104.00

420A PROVIDE 43'-NEW 6"PVC PIPE @ 1.16%

421 PROVIDE NEW 6" CO, INV.=1103.50

421A PROVIDE 34'-NEW 6" PVC PIPE @ 1.20%

422 PROVIDE NEW 6" CO, INV.=1103.09

422A PROVIDE 69'-NEW 6"PVC @ 12.08%

423 PROVIDE 16 METERS NEW "POLYDRAIN" SLOT DRAIN (UNIT 010 AT UPPER END, UNIT 160 AT LOWER END) w/ "TYPE 454" HEEL-PROOF AND ADA COMPLIANT GRATES. PROVIDE END CAPS, VERTICAL OUTLET UNITS, ETC. AS REQUIRED.
TOP GRATES=1102.75
INV. OUT= ± 1101.1

423A PROVIDE 21'-NEW 6" PVC @ 2.00% MIN.
INV. OUT=1101.88

424 PROVIDE NEW 6" CO, INV.=1094.75

424A PROVIDE 20'-NEW 6"PVC @ 12.08%
INV. OUT=1092.34

425 PROVIDE VDOT STD. STORM MANHOLE
RIM = 1108.30
INV. IN = 1102.30
INV. OUT = 1102.20

425A PROVIDE 70' NEW 15" CONCRETE PIPE AT 0.75%
INV. IN = 1102.20
INV. OUT = 1101.67

426 PROVIDE VDOT STD. DI-1 GRATE INLET
TOP = 1104.50
INV. IN= 1101.40
INV. OUT=1101.30

426A PROVIDE 70' NEW 15" RCP AT 1.56%
INV. IN = 1101.30
INV. OUT = 1000.20

430 PROVIDE 24" NYLOPLAST CATCH BASIN w/ STD. D.I. GRATE
TOP=1107.80
INV.=1106.07

430A PROVIDE 43'-NEW 6"PVC PIPE @ 1.04%

431 PROVIDE NEW 6" CO, INV.=1105.62

431A PROVIDE 35'-NEW 6" PVC PIPE @ 1.04%

432 PROVIDE NEW 6" CO, INV.=1105.26

432A PROVIDE 44'-NEW 6"PVC @ 2.00%

433 PROVIDE 16 METERS NEW "POLYDRAIN" SLOT DRAIN (UNIT 010 AT UPPER END, UNIT 160 AT LOWER END) w/ "TYPE 454" HEEL-PROOF AND ADA COMPLIANT GRATES. PROVIDE END CAPS, VERTICAL OUTLET UNITS, ETC. AS REQUIRED.
TOP GRATES=1107.75
INV. OUT= ± 1107.1

433A PROVIDE 20'-NEW 6" PVC @ 10.90%
INV. OUT=1104.92

434 PROVIDE NEW 6" CO, INV.=1104.38

434A PROVIDE 64'-NEW 6"PVC @ 2.00%
INV. OUT=1103.10

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WILLIAM FLEMING HIGH SCHOOL REVISED PHASE 2 AND STADIUM CONSTRUCTION

School Site Project No. 124-40A
Literary Loan No. 11255

NUMBER	ISSUE	DATE
	Per Owner Changes	03/02/10
	Per 1st City Review	09/24/09

Revisions

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CORBIN L. WHITE
Lic. No. 23843
03-02-10
PROFESSIONAL ENGINEER

Sheet Information	
Date	August 05, 2009
Job Number	XXXXXXXXX
Scale	As Shown
Drawn	C.L. White
Checked	
Approved	

Title

GRADING AND STORM DRAINAGE PLAN

Sheet

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