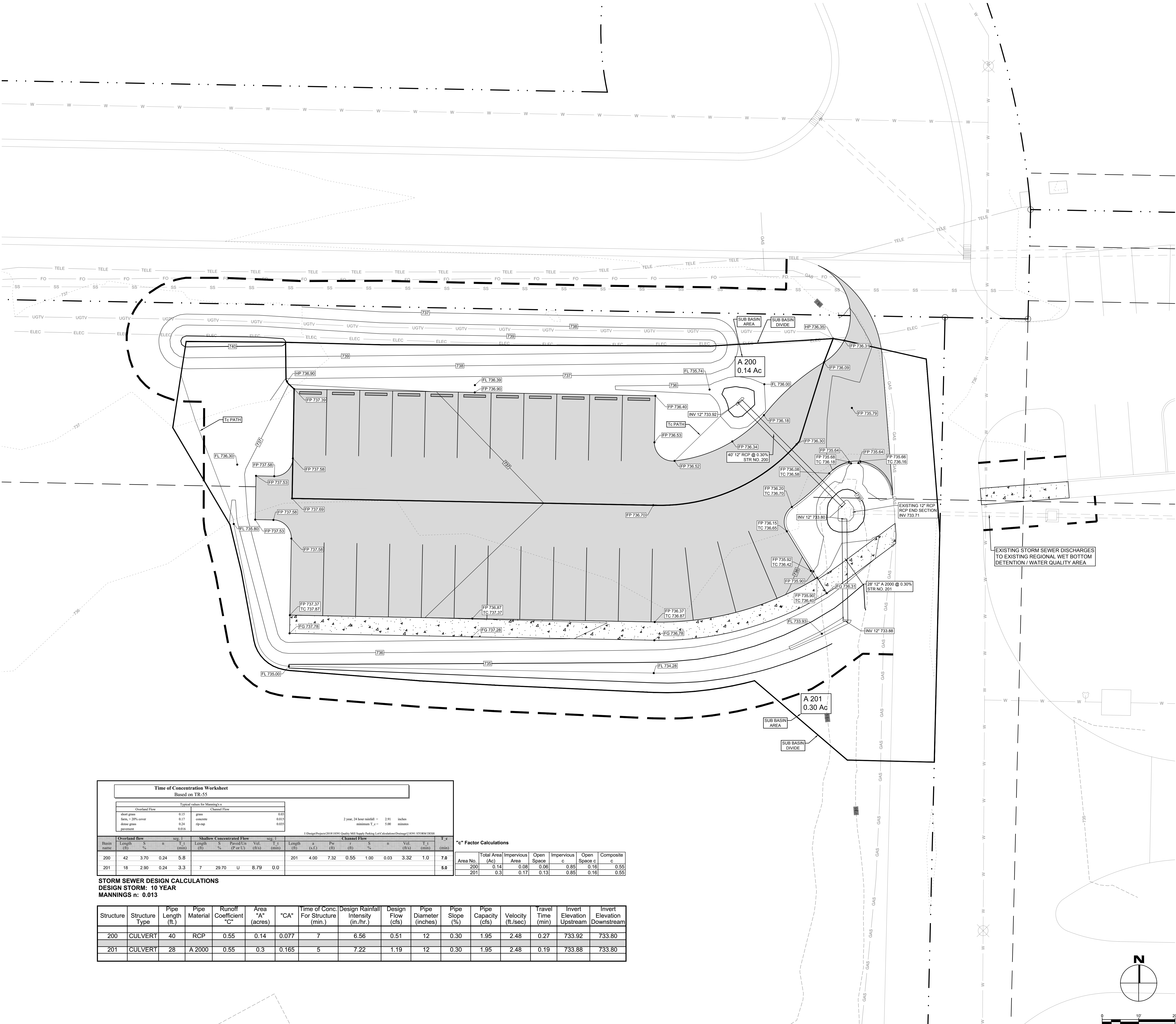


Drawing file: \\n\Design\Projects\2018\18391 Quality Mill Supply Parking Lot\CAD Files\Site\18391.dwg Date: 08 Oct 2018 - 3:55pm



DRAINAGE KEY NOTES

- 13 FULL DEPTH GRANULAR BACKFILL REQUIRED - SEE DETAIL 1 / C401
- 14 MATCH EXISTING GRADE
- 15 24" CURB CUT TO ALLOW DRAINAGE
- 16 BULL NOSE 6" CURB AT END

EXISTING LEGEND

- EX SANITARY SEWER MANHOLE + PIPE
- EX WATER MAIN
- EX STORM SEWER MANHOLE + PIPE
- EX FIBER OPTIC LINE
- EX TELEPHONE LINE
- EX CABLE TELEVISION LINE
- EX GAS LINE

GRADING LEGEND

- TOP OF CURB / FINISH PAVEMENT ELEVATION
- INTERMEDIATE CONTOUR
- INDEX CONTOUR
- FINISH FLOOR ELEVATION
- FINISH GRADE ELEVATION
- FINISH PAVEMENT ELEVATION
- LIMITS OF CONSTRUCTION

GENERAL NOTES

- STORM SEWER DESIGN BASED ON 10 YEAR EVENT USING THE CITY OF FRANKLIN RAINFALL DATA.
- DESIGN CALCULATIONS BASED ON THE RATIONAL METHOD.
- DRAINAGE DESIGN PERFORMED IN ACCORDANCE WITH THE CITY OF FRANKLIN STORMWATER MANAGEMENT ORDINANCE AND THE JOHNSON COUNTY STORMWATER TECHNICAL MANUAL.
- STORM SEWER STRUCTURE NUMBERS AND DRAINAGE AREA NUMBERS CORRELATE WITH THE NUMBERS FOUND IN THE DRAINAGE DESIGN CALCULATIONS.

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DATES / REVISIONS

ISSUED FOR PERMIT 10/05/18



Harold Force

PROJECT
QUALITY MILL SUPPLY

PARKING LOT

FRANKLIN, INDIANA

SHEET TITLE
DRAINAGE DESIGN
PLAN

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This drawing and all information contained herein is considered PRIVATE AND CONFIDENTIAL pursuant to the Non-Disclosure Agreement as executed between FORCE and all invited sub-contractors

NOT RELEASED FOR
CONSTRUCTION

PROJECT NUMBER
18391

SHEET NUMBER
C500
DRAWN BY
MSS

Time of Concentration Worksheet											
Based on TR-55											
Overland Flow						Channel Flow					
Typical values for Manning's n						Typical values for Manning's n					
short grass	0.15					grass	0.05				
firm > 20% cover	0.17					concrete	0.015				
dense grass	0.24					rip-rap	0.035				
porous	0.014										

STORM SEWER DESIGN CALCULATIONS											
DESIGN STORM: 10 YEAR											
MANNINGS n: 0.013											
Structure	Structure Type	Pipe Length (ft.)	Pipe Material	Runoff Coefficient "C"	Area "A" (acres)	"CA"	Time of Conc. For Structure (min.)	Design Rainfall Intensity (in./hr.)	Design Flow (cfs)	Pipe Diameter (inches)	Pipe Slope (%)
200	CULVERT	40	RCP	0.55	0.14	0.077	7	6.56	0.51	12	0.30
201	CULVERT	28	A 2000	0.55	0.3	0.165	5	7.22	1.19	12	0.30

*c" Factor Calculations											
Area No.	Total Area (Ac)	Impervious Area	Open Space	Impervious c	Open Space c	Composite c					
200	0.14	0.08	0.06	0.85	0.16	0.55					
201	0.3	0.17	0.13	0.85	0.16	0.55					