

COMPLEX CAD PRODUCTION — SAMPLE WORKFLOWS

Four concept projects presented as coordinated drawing sets, with details and QA checkpoints.

01 ALTA-STYLE COMMERCIAL SITE

Boundary control, easements, improvements, tables and encroachments.

02 TOPOGRAPHIC SURFACE + DRAINAGE

TIN contours, breaklines, spot elevations, catchments and profile.

03 ROADWAY / SUBDIVISION CORRIDOR

Alignment, stationing, grading, sections and earthwork quantities.

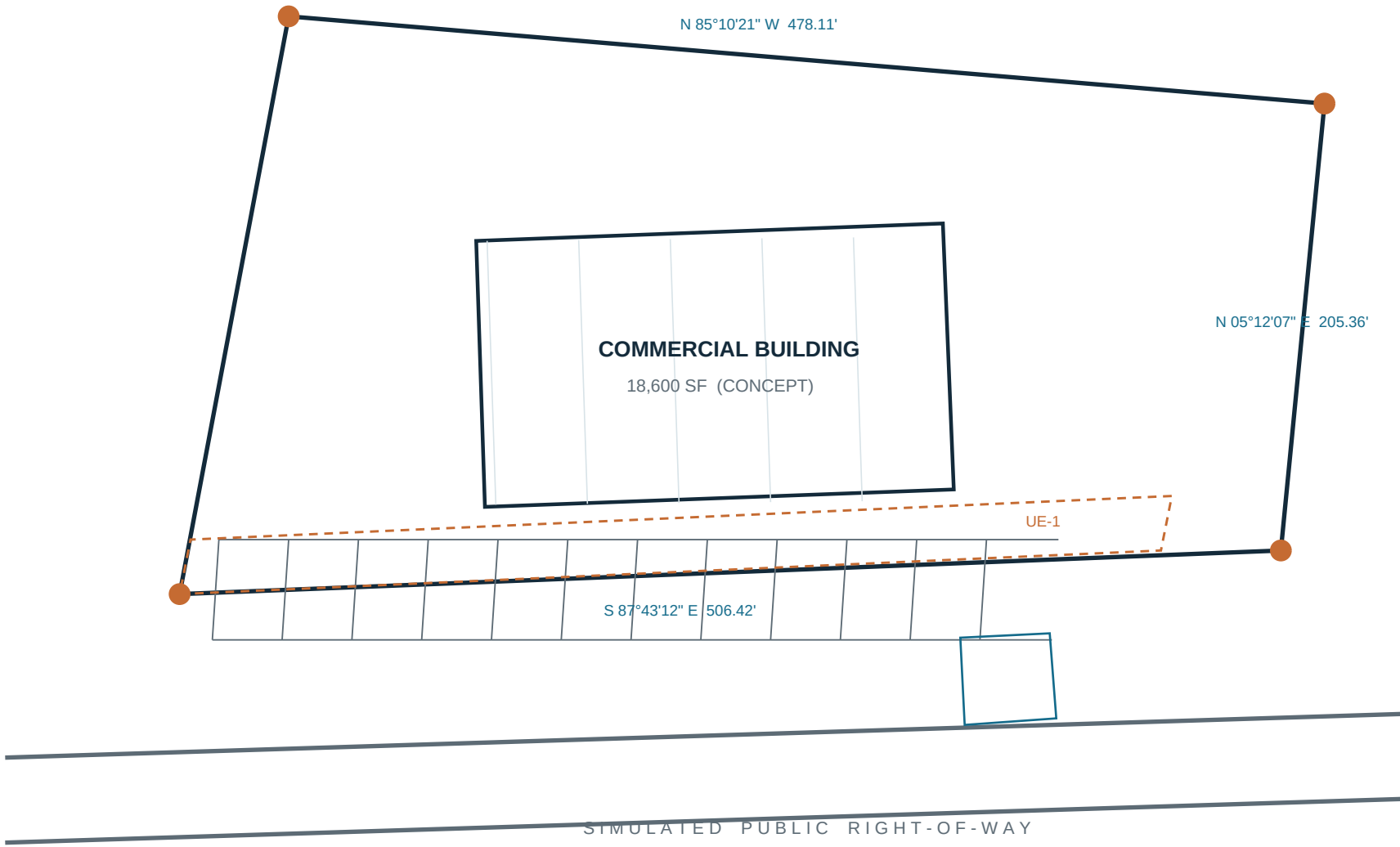
04 UTILITY COORDINATION PLAN

Water, sanitary, storm systems, crossings, schedules and details.

PRODUCTION FOCUS

Layer and xref discipline
Annotation hierarchy
Surface / profile workflows
Coordinate and unit checks
Revision tracking
Plot-ready sheets

QA BEFORE DELIVERY
Scale and label review
Closure / geometry checks
Conflict and clearance review
Licensed professional review



BOUNDARY / CONTROL

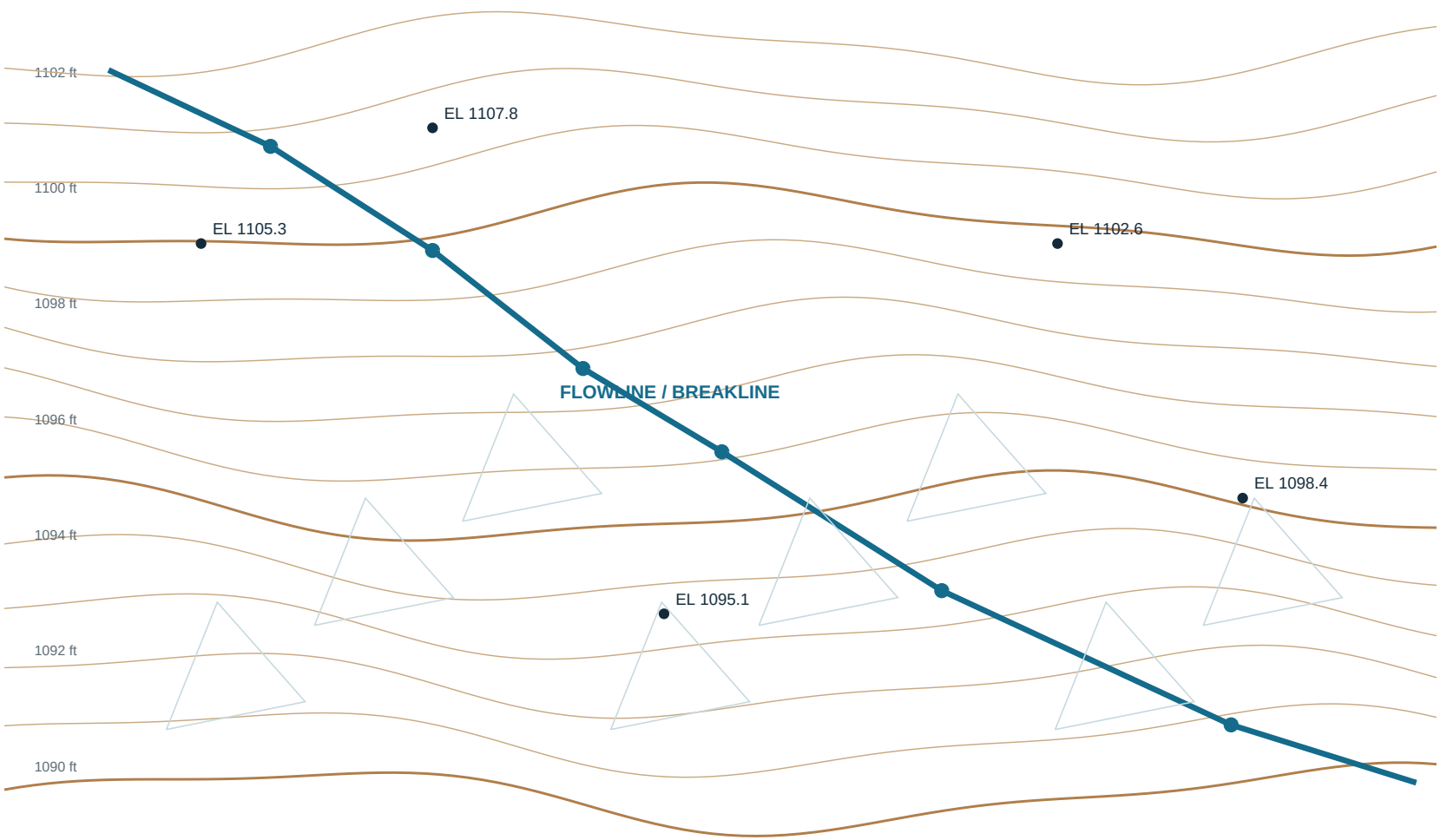
- P-01 N 10,245.227
E 8,515.116
- P-02 N 10,267.004
E 9,021.069
- P-03 N 10,472.112
E 9,039.738
- P-04 N 10,511.383
E 8,562.009

Coordinate system: LOCAL
Units: US survey feet
Closure: synthetic only

LEGEND / QA

- Found / set point (sample)
- - Utility easement UE-1
- Parcel boundary
- Building footprint

CHECKS
Boundary call consistency
Easement intersection review
Building setback review
Improvement annotation
No legal opinion provided



SURFACE BUILD

Synthetic point grid: 148
Breaklines: 6 modeled
Contour interval: 1 ft
Index contour: 5 ft
Surface limits: 4.8 acres

DRAINAGE REVIEW

Catchment A: 1.72 ac
Catchment B: 2.13 ac
Outlet: south-east
Flow path: 612 ft

All values illustrative

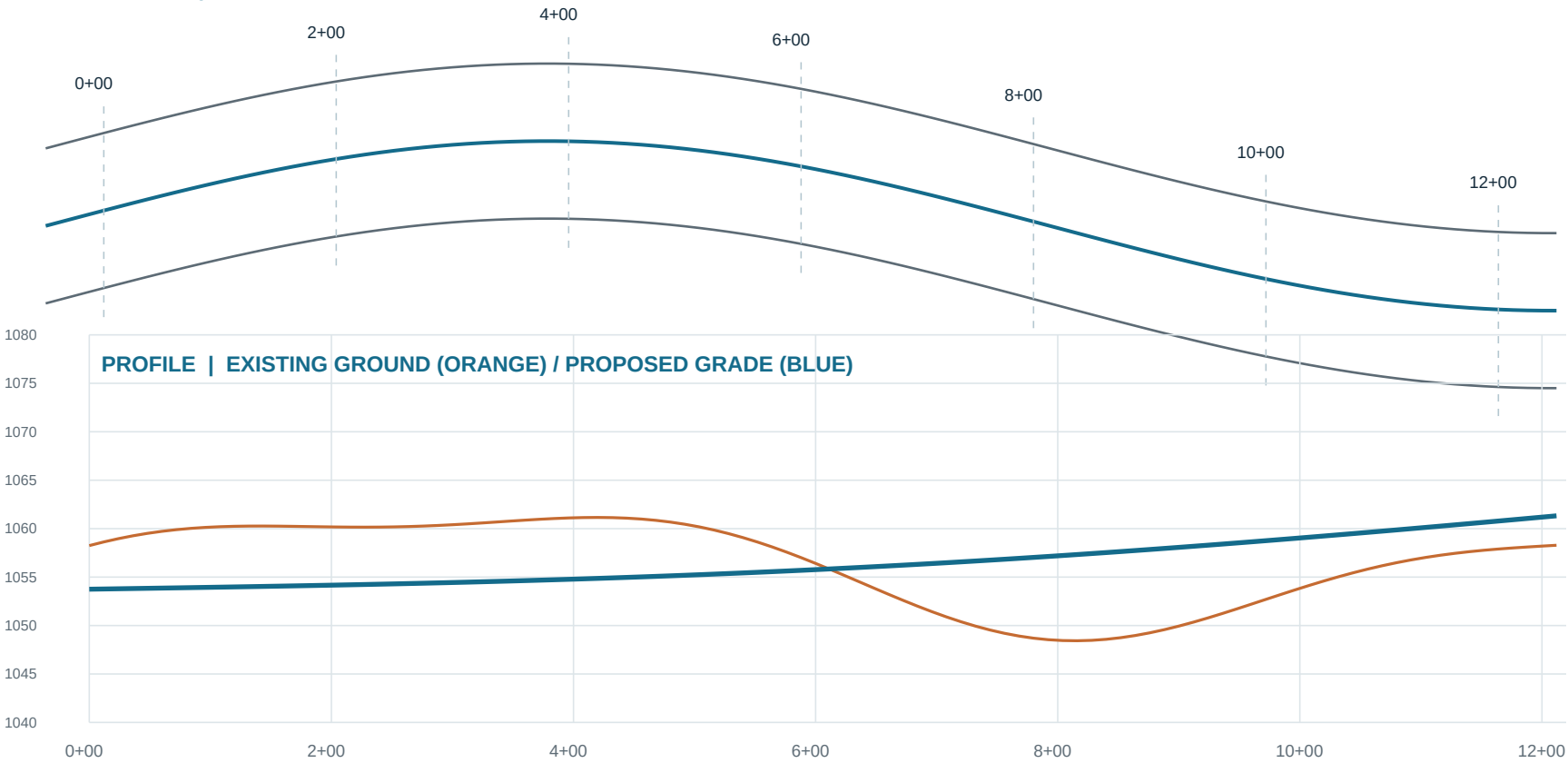
CAD DELIVERABLES

EG surface / contours
Point and breakline layers
Spot elevations
Slope arrows / watershed
Surface boundary
Longitudinal profile
Data validation report

CHECKS

Point duplicates / spikes
Breakline crossing
Contour labeling

PLAN VIEW | HORIZONTAL ALIGNMENT / STATIONING



TYPICAL SECTION

5' WALK | 12' | 12' | 5'

2% crossfall (concept)

30' curb-to-curb

CORRIDOR QA

Horizontal: 1,200 ft

Vertical: 2 PVIs

Design speed: illustrative

Sample max grade: 4.5%

EARTHWORK (CONCEPT)

Cut: 2,840 CY

Fill: 3,190 CY

Net: 350 CY import

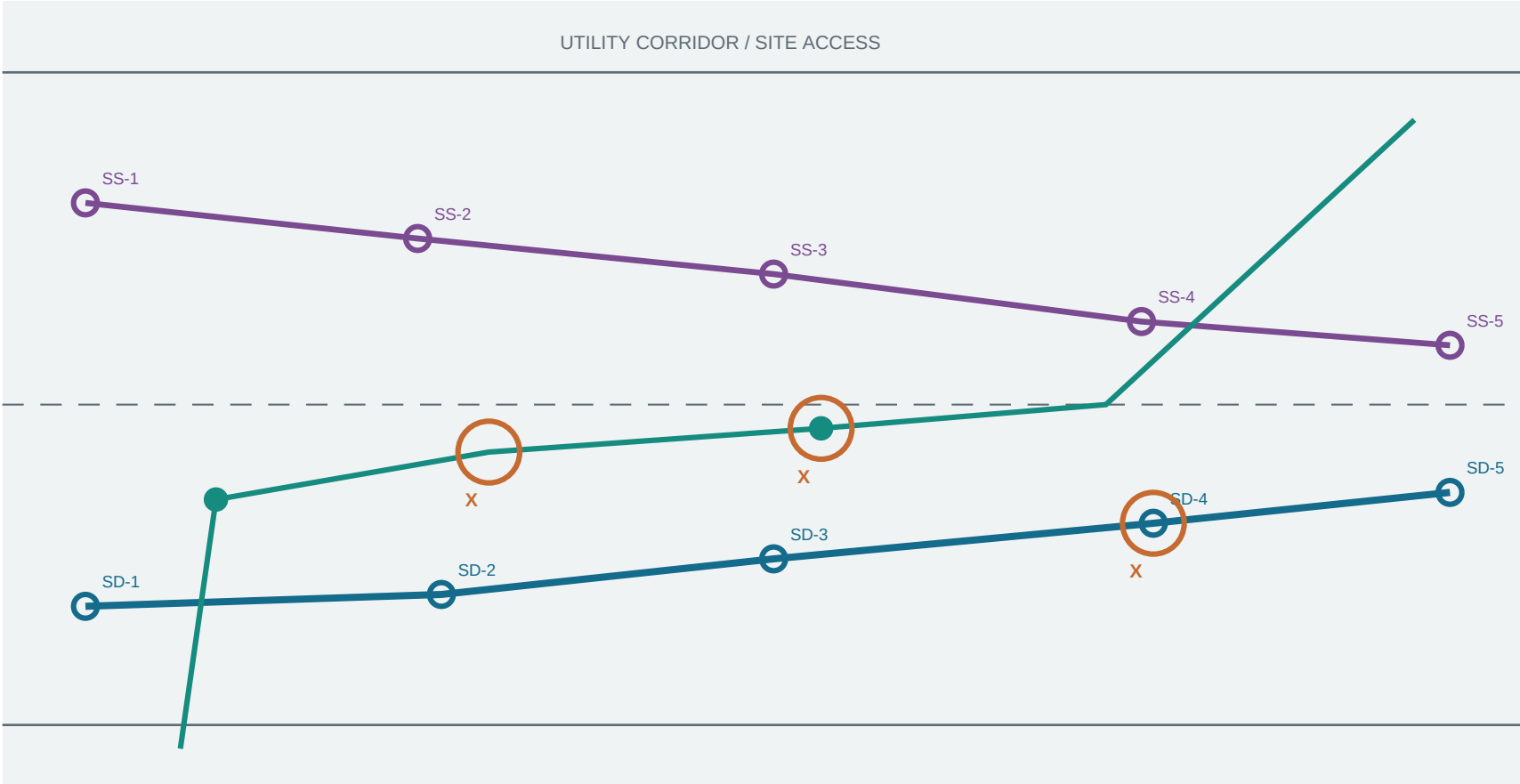
CHECKS

Station / offset labels

Profile continuity

Section daylight review

UTILITY PLAN | SCHEMATIC ALIGNMENTS / STRUCTURES / POTENTIAL CROSSINGS



SYSTEM LEGEND

- BLUE Storm drain
- PURPLE Sanitary sewer
- TEAL Domestic water
- ORANGE Conflict check

SAMPLE PIPE SCHEDULE

- SD-1 to SD-3: 18 in RCP
- SS-1 to SS-3: 8 in PVC
- W-1: 8 in DIP

Linework is schematic

CROSSING REVIEW

- X-01 W / SS crossing
 - Check invert / cover
- X-02 W / storm crossing
 - Verify vertical separation
- X-03 SD / service tie-in
 - Review utility clearance

COORDINATION CHECKS

- Structure rim / invert table
- Slope and cover verification
- Horizontal conflict scan
- Profile coordination
- Agency standards review

01 / INTAKE

Source DWG / DGN and point files
Coordinate basis / units / datum
Client CAD standards and CTB
Scope, revisions and deadlines

02 / PRODUCTION

Xrefs and named layers
Surface build / breakline QA
Alignments, profiles, sections
Labels, tables and callouts

03 / INTERNAL QA

Geometry closure / continuity
Contours / profiles / crossings
Plot scale and lineweights
Unresolved issues log

04 / CLIENT REVIEW

Redline incorporation
Revision clouds and delta log
DWG + plotted PDF delivery
Final licensed professional review

DEMONSTRATION NOTICE: All project studies are invented to illustrate production complexity and visual standards.