

DESIGN BASIS & SHEET INDEX

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

A complete, editable example of the review package: design basis, quantity schedule, model coordinates, context and detail maps, route register, and outstanding checks.

DESIGN BASIS	SAMPLE VALUE
Study	Alpine district / fictional demonstration
Network	71 nodes / 70 connections / 36 meter nodes
Voltage model	7,200 V primary; 240 V secondary; single-phase equivalent
Transformer model	9 transformer edges; ratings are model assumptions
Routing	Mixed OH and UG; geometry retained from bundled source
Coordinate basis	Local metres; no CRS, legal parcel boundaries or survey control
Estimate status	Quantities only. No supplier quotes or approved assemblies.

SHEET INDEX

G-001 Basis / Q-001 Takeoff / S-001–006 Coordinates / C-001 Context / E-001–003 Detailed network maps / R-001–003 Routes / G-002 Review register.

REFERENCE

Structure informed by the supplied seven-sheet CONCEPT-TIMBERLINE packet. Its customer/site geometry, prices and utility branding are not reproduced. This sample is regenerated from the existing synthetic Alpine JSON.

QUANTITY & BID BASIS

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

ITEM / CLASS	QUANTITY	BASIS	COST
primary / OH	1724.00 m	5656.2 ft	Unpriced
secondary / UG	222.78 m	730.9 ft	Unpriced
service / UG	3888.00 m	12755.9 ft	Unpriced
primary / UG	48.00 m	157.5 ft	Unpriced
source	1 nodes	See model note	Unpriced
pole	12 nodes	See model note	Unpriced
transformer lv	9 nodes	See model note	Unpriced
pedestal	9 nodes	See model note	Unpriced
meter	36 nodes	See model note	Unpriced
transformer hv	4 nodes	See model note	Unpriced
Transformer connections	9 units	Electrical edges	Unpriced

QUANTITY RULES

Lengths are source JSON route lengths, not surveyed or purchased cable lengths. No waste, vertical leads, slack, sag or pulling allowances are added. Transformer HV/LV nodes are connection points and must not be counted as separate physical transformers.

BID WORK TO COMPLETE

Map conductor sizes and conduit requirements to approved assemblies; add poles, risers, grounding, protection, vaults, pads, trenching, traffic control and restoration as applicable. All rates remain unpriced rather than copying another project's estimate.

MODEL COORDINATE SCHEDULE

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

FACILITY ID / TYPE	X (m)	Y (m)	Z (m)	V
DEMO-SOURCE source	-315.000	0.000	0.000	7200
SPINE-0 pole	-267.000	0.000	0.000	7200
SPINE--190 pole	-267.000	190.000	0.000	7200
SPINE-190 pole	-267.000	-190.000	0.000	7200
DEMO-POLE-1 pole	-195.000	190.000	0.000	7200
DEMO-LV-1 transformer_lv	-195.000	190.000	0.000	240
DEMO-PED-1 pedestal	-165.000	188.000	0.000	240
DEMO-METER-1-1 meter	-231.000	249.000	0.000	240
DEMO-METER-1-2 meter	-133.000	249.000	0.000	240
DEMO-METER-1-3 meter	-231.000	131.000	0.000	240
DEMO-METER-1-4 meter	-133.000	131.000	0.000	240
DEMO-POLE-2 pole	-15.000	190.000	0.000	7200
DEMO-HV-2 transformer_hv	-3.000	190.000	0.000	7200
DEMO-LV-2 transformer_lv	-3.000	190.000	0.000	240

Model coordinate schedule only. Z values are supplied model values, not surveyed elevations or equipment installation heights. Actions and field staking offsets remain unassigned.

MODEL COORDINATE SCHEDULE

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

FACILITY ID / TYPE	X (m)	Y (m)	Z (m)	V
DEMO-PED-2 pedestal	15.000	188.000	0.000	240
DEMO-METER-2-1 meter	-51.000	249.000	0.000	240
DEMO-METER-2-2 meter	47.000	249.000	0.000	240
DEMO-METER-2-3 meter	-51.000	131.000	0.000	240
DEMO-METER-2-4 meter	47.000	131.000	0.000	240
DEMO-POLE-3 pole	165.000	190.000	0.000	7200
DEMO-LV-3 transformer_lv	165.000	190.000	0.000	240
DEMO-PED-3 pedestal	195.000	188.000	0.000	240
DEMO-METER-3-1 meter	129.000	249.000	0.000	240
DEMO-METER-3-2 meter	227.000	249.000	0.000	240
DEMO-METER-3-3 meter	129.000	131.000	0.000	240
DEMO-METER-3-4 meter	227.000	131.000	0.000	240
DEMO-POLE-4 pole	-195.000	0.000	0.000	7200
DEMO-HV-4 transformer_hv	-183.000	0.000	0.000	7200

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MODEL COORDINATE SCHEDULE

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

FACILITY ID / TYPE	X (m)	Y (m)	Z (m)	V
DEMO-LV-4 transformer_lv	-183.000	0.000	0.000	240
DEMO-PED-4 pedestal	-165.000	-2.000	0.000	240
DEMO-METER-4-1 meter	-231.000	59.000	0.000	240
DEMO-METER-4-2 meter	-133.000	59.000	0.000	240
DEMO-METER-4-3 meter	-231.000	-59.000	0.000	240
DEMO-METER-4-4 meter	-133.000	-59.000	0.000	240
DEMO-POLE-5 pole	-15.000	0.000	0.000	7200
DEMO-LV-5 transformer_lv	-15.000	0.000	0.000	240
DEMO-PED-5 pedestal	15.000	-2.000	0.000	240
DEMO-METER-5-1 meter	-51.000	59.000	0.000	240
DEMO-METER-5-2 meter	47.000	59.000	0.000	240
DEMO-METER-5-3 meter	-51.000	-59.000	0.000	240
DEMO-METER-5-4 meter	47.000	-59.000	0.000	240
DEMO-POLE-6 pole	165.000	0.000	0.000	7200

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MODEL COORDINATE SCHEDULE

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

FACILITY ID / TYPE	X (m)	Y (m)	Z (m)	V
DEMO-HV-6 transformer_hv	177.000	0.000	0.000	7200
DEMO-LV-6 transformer_lv	177.000	0.000	0.000	240
DEMO-PED-6 pedestal	195.000	-2.000	0.000	240
DEMO-METER-6-1 meter	129.000	59.000	0.000	240
DEMO-METER-6-2 meter	227.000	59.000	0.000	240
DEMO-METER-6-3 meter	129.000	-59.000	0.000	240
DEMO-METER-6-4 meter	227.000	-59.000	0.000	240
DEMO-POLE-7 pole	-195.000	-190.000	0.000	7200
DEMO-LV-7 transformer_lv	-195.000	-190.000	0.000	240
DEMO-PED-7 pedestal	-165.000	-192.000	0.000	240
DEMO-METER-7-1 meter	-231.000	-131.000	0.000	240
DEMO-METER-7-2 meter	-133.000	-131.000	0.000	240
DEMO-METER-7-3 meter	-231.000	-249.000	0.000	240
DEMO-METER-7-4 meter	-133.000	-249.000	0.000	240

Model coordinate schedule only. Z values are supplied model values, not surveyed elevations or equipment installation heights. Actions and field staking offsets remain unassigned.

MODEL COORDINATE SCHEDULE

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

FACILITY ID / TYPE	X (m)	Y (m)	Z (m)	V
DEMO-POLE-8 pole	-15.000	-190.000	0.000	7200
DEMO-HV-8 transformer_hv	-3.000	-190.000	0.000	7200
DEMO-LV-8 transformer_lv	-3.000	-190.000	0.000	240
DEMO-PED-8 pedestal	15.000	-192.000	0.000	240
DEMO-METER-8-1 meter	-51.000	-131.000	0.000	240
DEMO-METER-8-2 meter	47.000	-131.000	0.000	240
DEMO-METER-8-3 meter	-51.000	-249.000	0.000	240
DEMO-METER-8-4 meter	47.000	-249.000	0.000	240
DEMO-POLE-9 pole	165.000	-190.000	0.000	7200
DEMO-LV-9 transformer_lv	165.000	-190.000	0.000	240
DEMO-PED-9 pedestal	195.000	-192.000	0.000	240
DEMO-METER-9-1 meter	129.000	-131.000	0.000	240
DEMO-METER-9-2 meter	227.000	-131.000	0.000	240
DEMO-METER-9-3 meter	129.000	-249.000	0.000	240

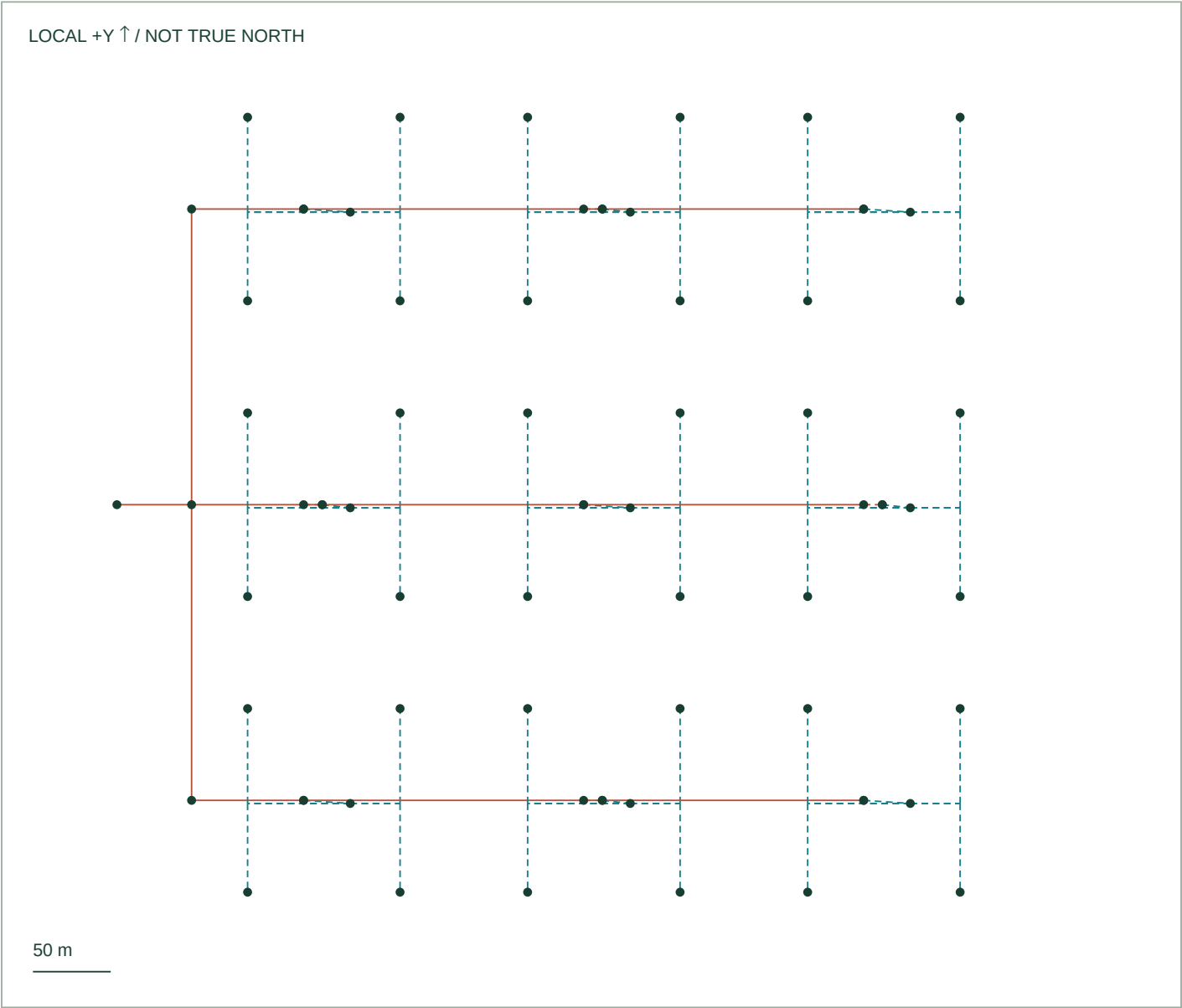
Model coordinate schedule only. Z values are supplied model values, not surveyed elevations or equipment installation heights. Actions and field staking offsets remain unassigned.

MODEL COORDINATE SCHEDULE

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

FACILITY ID / TYPE	X (m)	Y (m)	Z (m)	V
DEMO-METER-9-4 meter	227.000	-249.000	0.000	240

Model coordinate schedule only. Z values are supplied model values, not surveyed elevations or equipment installation heights. Actions and field staking offsets remain unassigned.



CONTEXT / ADDRESS BASIS

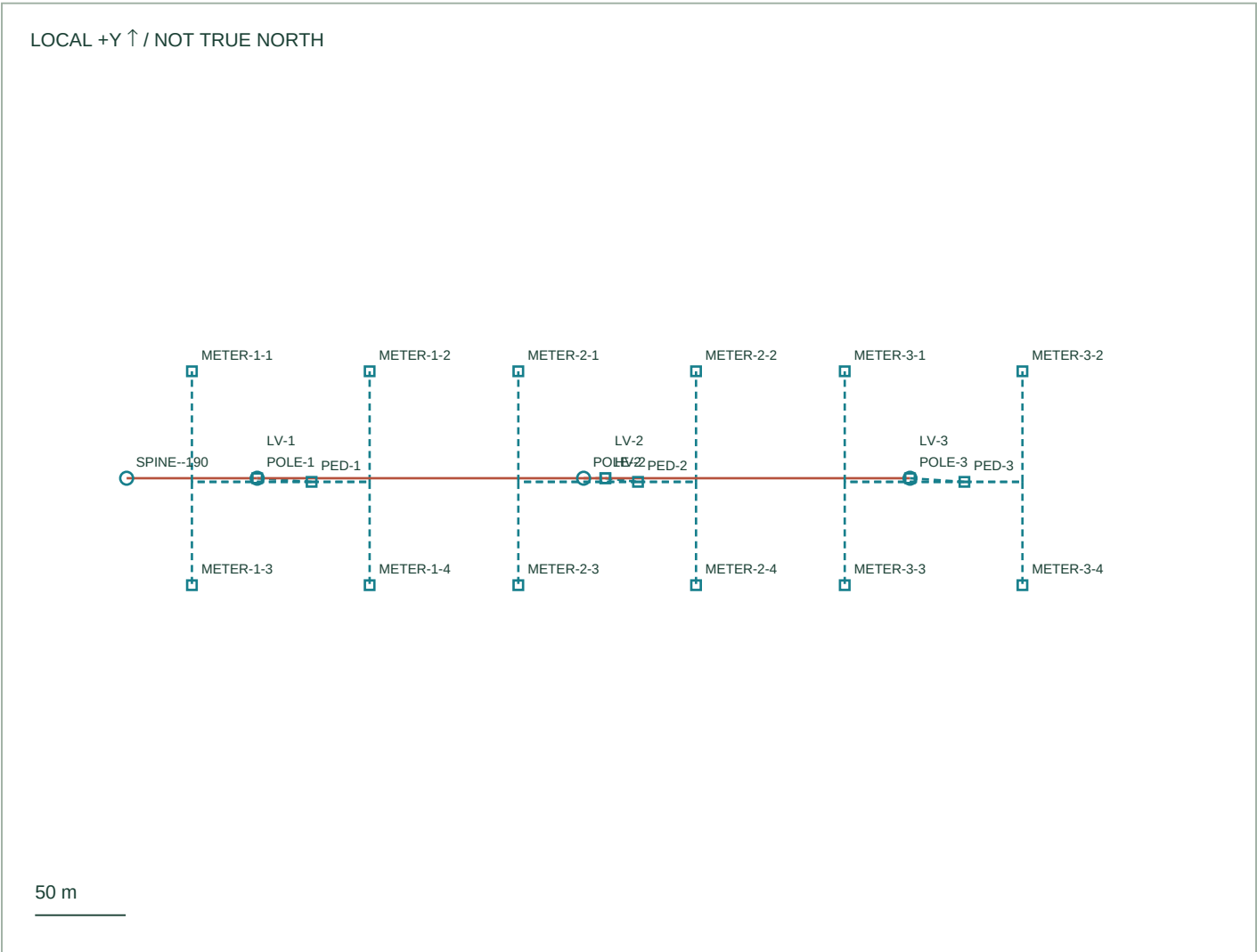
The sample has no real addresses, cadastral boundaries or recorded easements. Meter IDs identify fictional service locations. Maps E-001–003 expand the three model rows and label every facility.

Red = primary; teal = secondary/service. Solid = OH; dashed = UG. No road-crossing compliance or legal corridor approval is implied by this schematic.

LUSCHER ENGINEERING STUDIO

FACILITY DETAIL / ROW 1

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION



READING THIS MAP

Facility labels omit the common DEMO- prefix; full IDs appear in the coordinate schedule. Co-located transformer connection points are offset for readability. Route IDs, endpoints and lengths are in R-001–003.

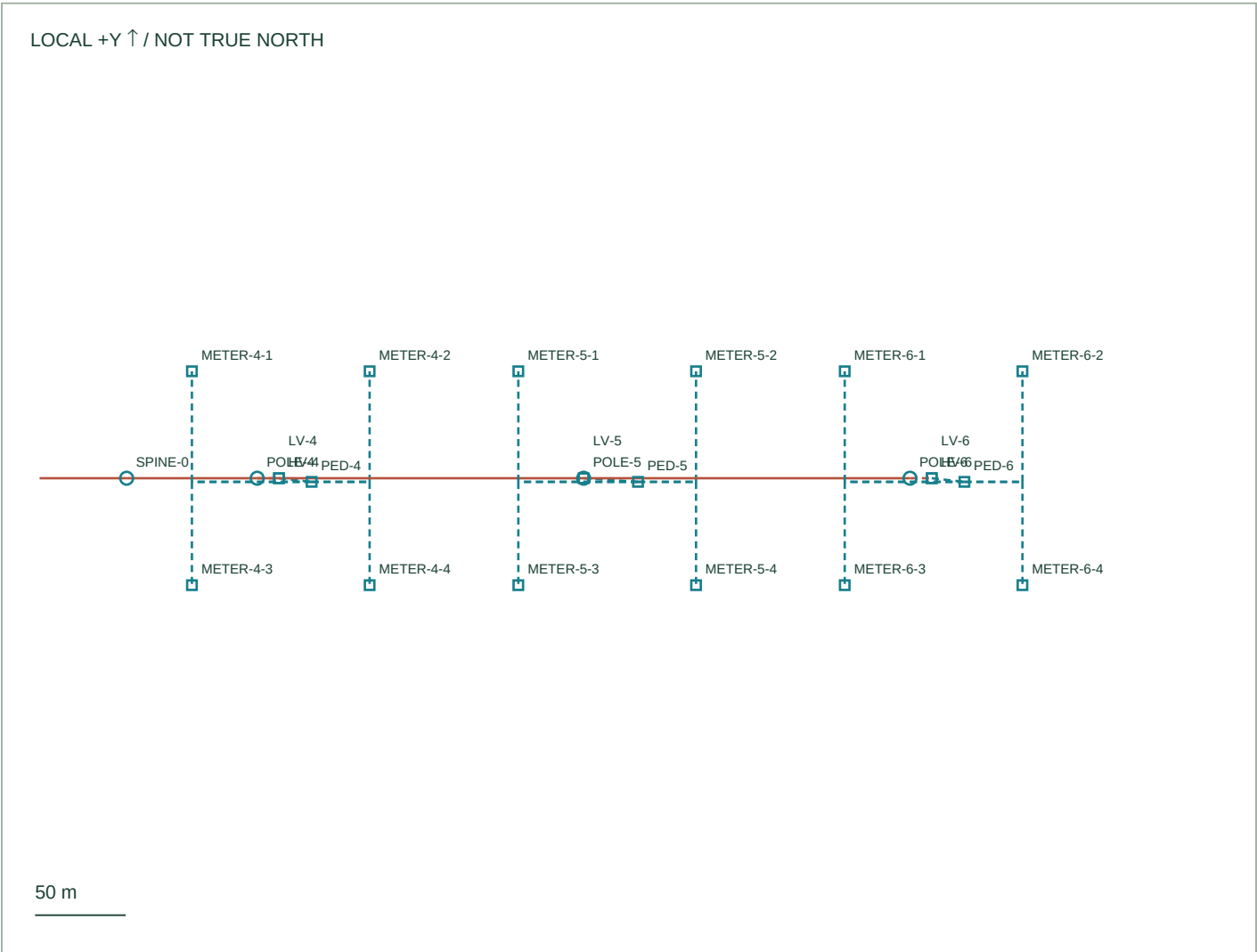
ENGINEERING REVIEW

This map retains the model's original route geometry. Easements, pole attachment heights, risers, road crossings, clearances and conductor selections remain to be designed. No proposed legal corridor is inferred from fictional parcels.

LUSCHER ENGINEERING STUDIO

FACILITY DETAIL / ROW 2

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION



READING THIS MAP

Facility labels omit the common DEMO- prefix; full IDs appear in the coordinate schedule. Co-located transformer connection points are offset for readability. Route IDs, endpoints and lengths are in R-001–003.

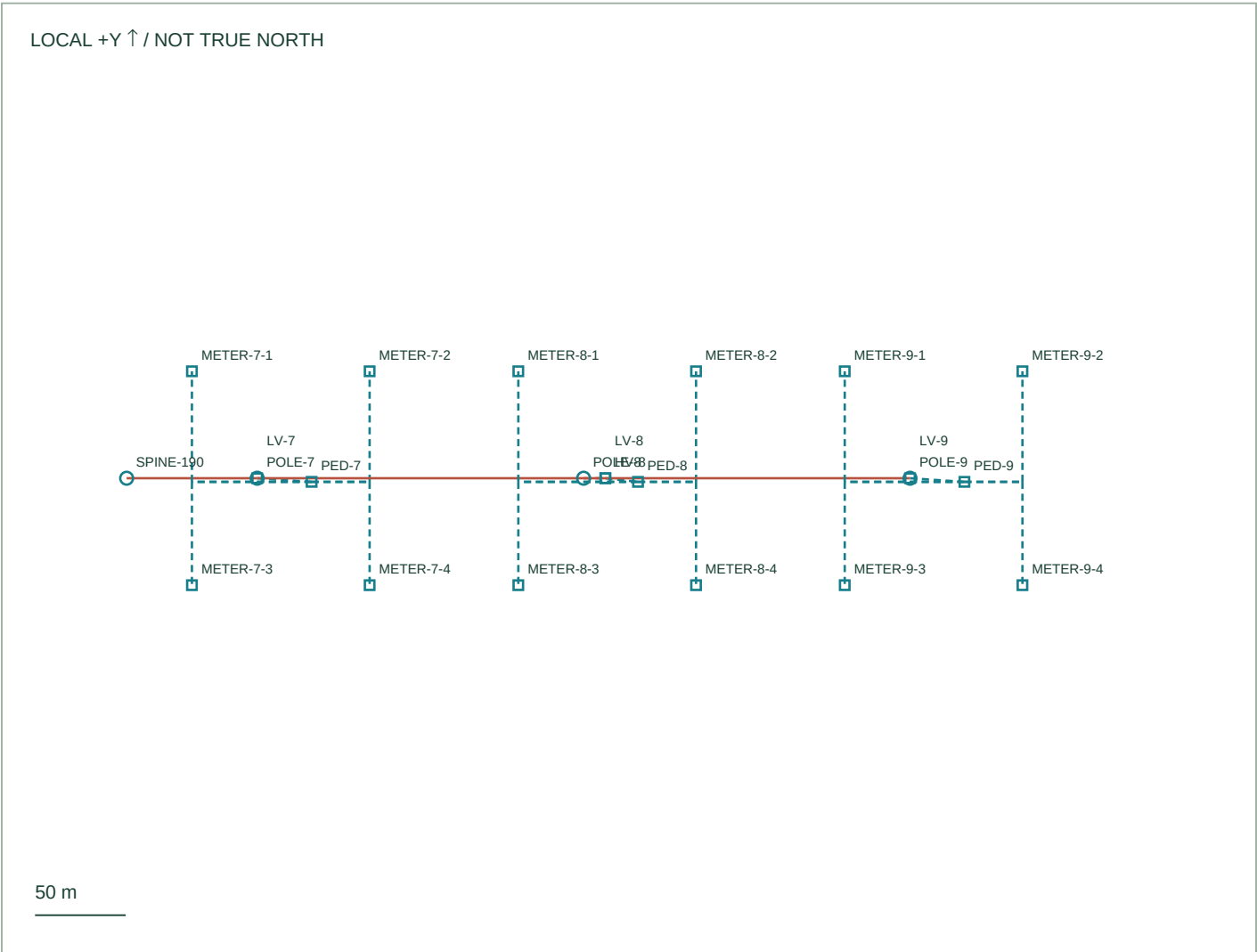
ENGINEERING REVIEW

This map retains the model's original route geometry. Easements, pole attachment heights, risers, road crossings, clearances and conductor selections remain to be designed. No proposed legal corridor is inferred from fictional parcels.

LUSCHER ENGINEERING STUDIO

FACILITY DETAIL / ROW 3

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION



READING THIS MAP

Facility labels omit the common DEMO- prefix; full IDs appear in the coordinate schedule. Co-located transformer connection points are offset for readability. Route IDs, endpoints and lengths are in R-001–003.

ENGINEERING REVIEW

This map retains the model's original route geometry. Easements, pole attachment heights, risers, road crossings, clearances and conductor selections remain to be designed. No proposed legal corridor is inferred from fictional parcels.

CONTINUOUS ROUTE REGISTER

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

ROUTE ID	FROM → TO	CIRCUIT	m	ft
SUPPLY	SOURCE → SPINE-0	primary / OH	48.00	157.5
SPINE-N	SPINE-0 → SPINE--190	primary / OH	190.00	623.4
SPINE-S	SPINE-0 → SPINE-190	primary / OH	190.00	623.4
PRIMARY-1	SPINE--190 → POLE-1	primary / OH	72.00	236.2
SECONDARY-1	LV-1 → PED-1	secondary / UG	30.07	98.6
SERVICE-1-1	PED-1 → METER-1-1	service / UG	127.00	416.7
SERVICE-1-2	PED-1 → METER-1-2	service / UG	93.00	305.1
SERVICE-1-3	PED-1 → METER-1-3	service / UG	123.00	403.5
SERVICE-1-4	PED-1 → METER-1-4	service / UG	89.00	292.0
PRIMARY-2	POLE-1 → POLE-2	primary / OH	180.00	590.6
RISER-PRIMARY-2	POLE-2 → HV-2	primary / UG	12.00	39.4
SECONDARY-2	LV-2 → PED-2	secondary / UG	18.11	59.4
SERVICE-2-1	PED-2 → METER-2-1	service / UG	127.00	416.7
SERVICE-2-2	PED-2 → METER-2-2	service / UG	93.00	305.1
SERVICE-2-3	PED-2 → METER-2-3	service / UG	123.00	403.5
SERVICE-2-4	PED-2 → METER-2-4	service / UG	89.00	292.0
PRIMARY-3	POLE-2 → POLE-3	primary / OH	180.00	590.6
SECONDARY-3	LV-3 → PED-3	secondary / UG	30.07	98.6
SERVICE-3-1	PED-3 → METER-3-1	service / UG	127.00	416.7
SERVICE-3-2	PED-3 → METER-3-2	service / UG	93.00	305.1
SERVICE-3-3	PED-3 → METER-3-3	service / UG	123.00	403.5
SERVICE-3-4	PED-3 → METER-3-4	service / UG	89.00	292.0

IDs omit DEMO- where present. Each row is one source route, not a count of its drawing vertices. Conductor sizes are unverified; conduit quantities and installation assemblies are not defined in the source model.

CONTINUOUS ROUTE REGISTER

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

ROUTE ID	FROM → TO	CIRCUIT	m	ft
PRIMARY-4	SPINE-0 → POLE-4	primary / OH	72.00	236.2
RISER-PRIMARY-4	POLE-4 → HV-4	primary / UG	12.00	39.4
SECONDARY-4	LV-4 → PED-4	secondary / UG	18.11	59.4
SERVICE-4-1	PED-4 → METER-4-1	service / UG	127.00	416.7
SERVICE-4-2	PED-4 → METER-4-2	service / UG	93.00	305.1
SERVICE-4-3	PED-4 → METER-4-3	service / UG	123.00	403.5
SERVICE-4-4	PED-4 → METER-4-4	service / UG	89.00	292.0
PRIMARY-5	POLE-4 → POLE-5	primary / OH	180.00	590.6
SECONDARY-5	LV-5 → PED-5	secondary / UG	30.07	98.6
SERVICE-5-1	PED-5 → METER-5-1	service / UG	127.00	416.7
SERVICE-5-2	PED-5 → METER-5-2	service / UG	93.00	305.1
SERVICE-5-3	PED-5 → METER-5-3	service / UG	123.00	403.5
SERVICE-5-4	PED-5 → METER-5-4	service / UG	89.00	292.0
PRIMARY-6	POLE-5 → POLE-6	primary / OH	180.00	590.6
RISER-PRIMARY-6	POLE-6 → HV-6	primary / UG	12.00	39.4
SECONDARY-6	LV-6 → PED-6	secondary / UG	18.11	59.4
SERVICE-6-1	PED-6 → METER-6-1	service / UG	127.00	416.7
SERVICE-6-2	PED-6 → METER-6-2	service / UG	93.00	305.1
SERVICE-6-3	PED-6 → METER-6-3	service / UG	123.00	403.5
SERVICE-6-4	PED-6 → METER-6-4	service / UG	89.00	292.0
PRIMARY-7	SPINE-190 → POLE-7	primary / OH	72.00	236.2
SECONDARY-7	LV-7 → PED-7	secondary / UG	30.07	98.6

IDs omit DEMO- where present. Each row is one source route, not a count of its drawing vertices. Conductor sizes are unverified; conduit quantities and installation assemblies are not defined in the source model.

CONTINUOUS ROUTE REGISTER

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

ROUTE ID	FROM → TO	CIRCUIT	m	ft
SERVICE-7-1	PED-7 → METER-7-1	service / UG	127.00	416.7
SERVICE-7-2	PED-7 → METER-7-2	service / UG	93.00	305.1
SERVICE-7-3	PED-7 → METER-7-3	service / UG	123.00	403.5
SERVICE-7-4	PED-7 → METER-7-4	service / UG	89.00	292.0
PRIMARY-8	POLE-7 → POLE-8	primary / OH	180.00	590.6
RISER-PRIMARY-8	POLE-8 → HV-8	primary / UG	12.00	39.4
SECONDARY-8	LV-8 → PED-8	secondary / UG	18.11	59.4
SERVICE-8-1	PED-8 → METER-8-1	service / UG	127.00	416.7
SERVICE-8-2	PED-8 → METER-8-2	service / UG	93.00	305.1
SERVICE-8-3	PED-8 → METER-8-3	service / UG	123.00	403.5
SERVICE-8-4	PED-8 → METER-8-4	service / UG	89.00	292.0
PRIMARY-9	POLE-8 → POLE-9	primary / OH	180.00	590.6
SECONDARY-9	LV-9 → PED-9	secondary / UG	30.07	98.6
SERVICE-9-1	PED-9 → METER-9-1	service / UG	127.00	416.7
SERVICE-9-2	PED-9 → METER-9-2	service / UG	93.00	305.1
SERVICE-9-3	PED-9 → METER-9-3	service / UG	123.00	403.5
SERVICE-9-4	PED-9 → METER-9-4	service / UG	89.00	292.0

IDs omit DEMO- where present. Each row is one source route, not a count of its drawing vertices. Conductor sizes are unverified; conduit quantities and installation assemblies are not defined in the source model.

REVIEW & DATA HANDOFF

SYNTHETIC CONCEPT / NOT FOR CONSTRUCTION

REVIEW TOPIC	STATUS / REQUIRED INPUT
Survey control / datum	Not supplied. Establish CRS, accuracy and control.
Address / parcels / easements	Synthetic only. Confirm legal boundaries, access and approvals.
Source / phase / transformer	Confirm capacity, phase availability, equipment ratings and protection.
Pole / riser / pad / vault	Physical assemblies and attachment heights not defined.
Conductor / conduit	Model impedances and ampacity are assumptions; select approved assemblies.
Voltage drop / loading	Source contains example loads, but no validated results are issued here.
Crossings / clearances	Review each route against streets, utilities and applicable standards.
Permits / fence / clearing	Not recorded; field scope and permissions required.
Cost / procurement	Unpriced. Obtain current rates and installation allowances.
Design / check / issue	Pending. No professional seal or construction approval.

DATA HANDOFF

The download includes the source network JSON, full facility and route CSVs, labeled DXF and this PDF. Map IDs and field names to the receiving GIS schema; establish coordinate registration before import. No automatic ArcFM mapping is claimed.