

800 East Expansion from 800 South to Center Street

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Existing Roadway

INTRODUCTION

- The City of Orem is currently evaluating the expansion of 800 East from Center Street to 800 South. The current level of service (LOS) of 800 East from Center Street down to 800 South is Level B. Projections show that this road will go from a LOS B to a LOS E or worse in 5 years if no action is taken
- Both Orem and Mountainland Association of Governments (MAG) have in their transportation masterplans an addition of one lane in each direction on 800 East to increase flow during peak hour traffic. Orem has proposed that this happens in the next 5 years, while MAG has classified this project as a Phase 3 improvement, not to be started until 2035-2040.
- The overall goal for this capstone project was to develop a concept that would operate at an acceptable LOS up to year 2050 while taking into consideration the following:
 - Cost
 - ROW impacts
 - Public health and safety
 - Social impacts
 - Global impacts
 - Cultural impacts
 - Economic impacts
 - Feasibility

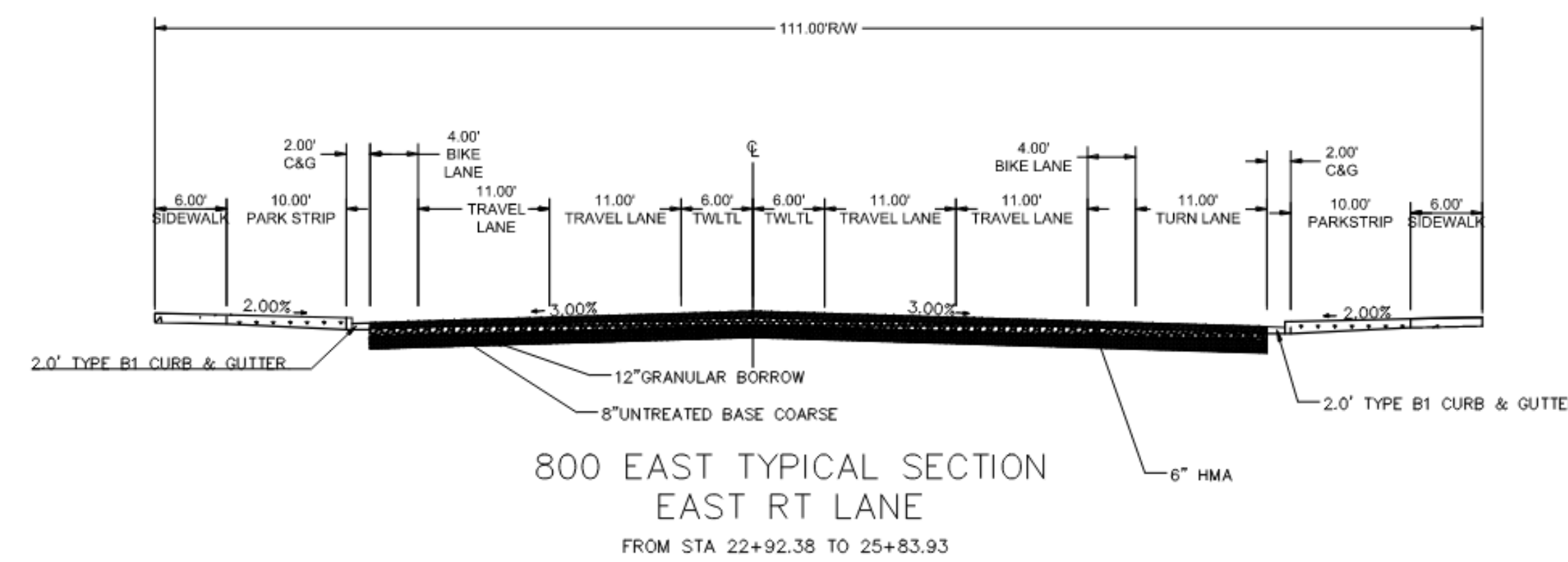
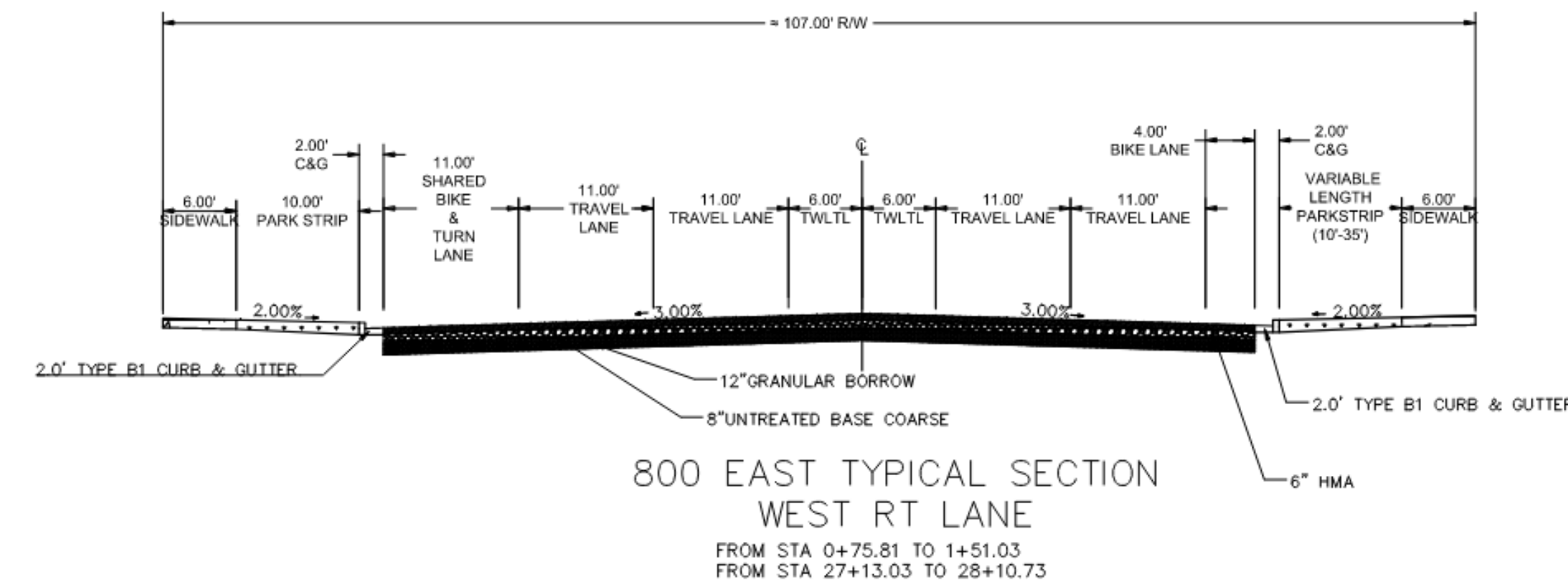
CONCLUSIONS

4 Concepts were chosen and scored. 1: No Change, 2: Frontage Road, 3: Symmetrical Widening, 4: Widening to the West. Concept 4, the West Expansion was the best choice. It consistently scored high in the rankings.

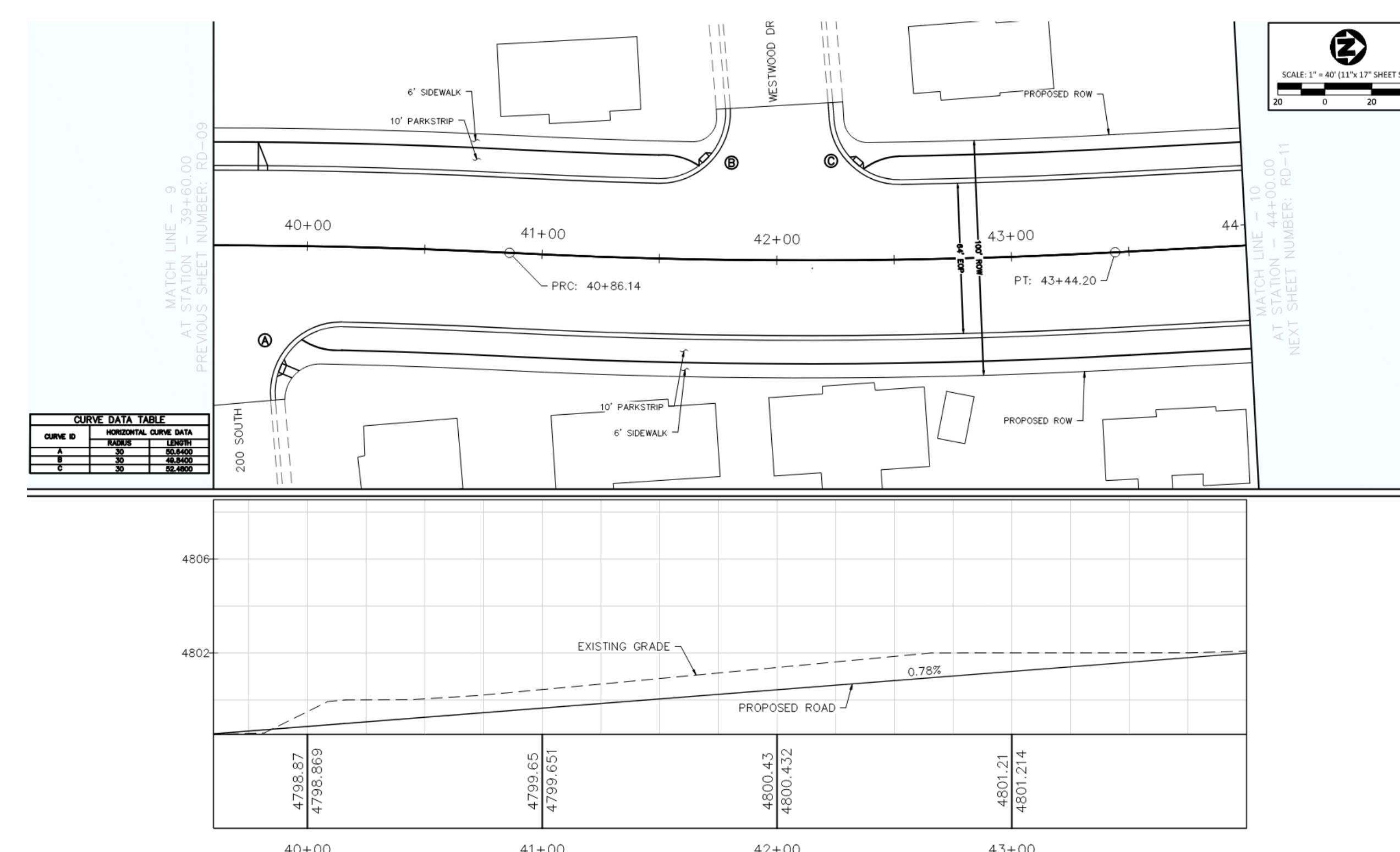
DESIGN

The future roadway plans were designed using AutoCAD. Plans included the following sheets. All plans were drawn in accordance with the specifications listed in the references section below.

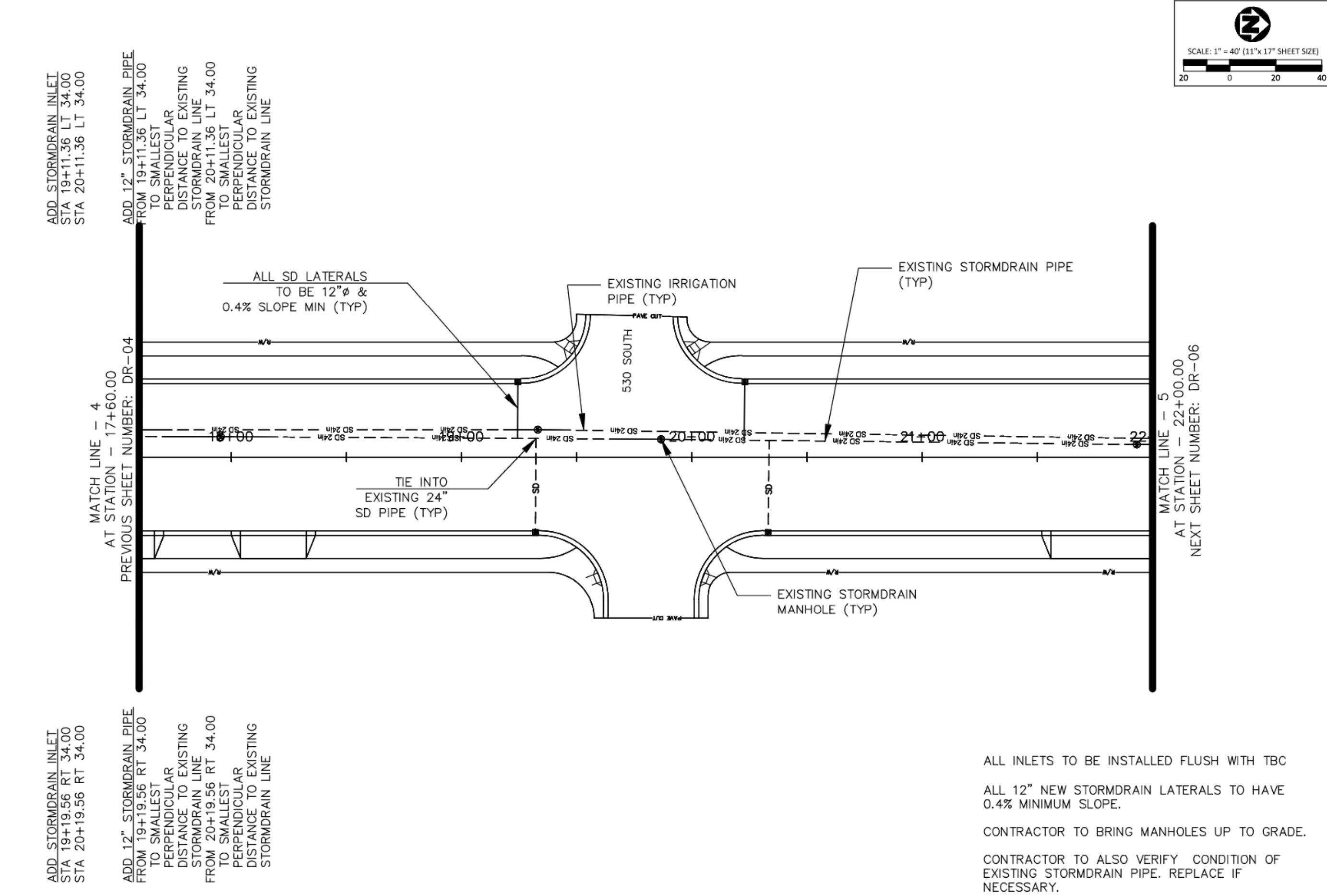
TYPICAL SECTIONS



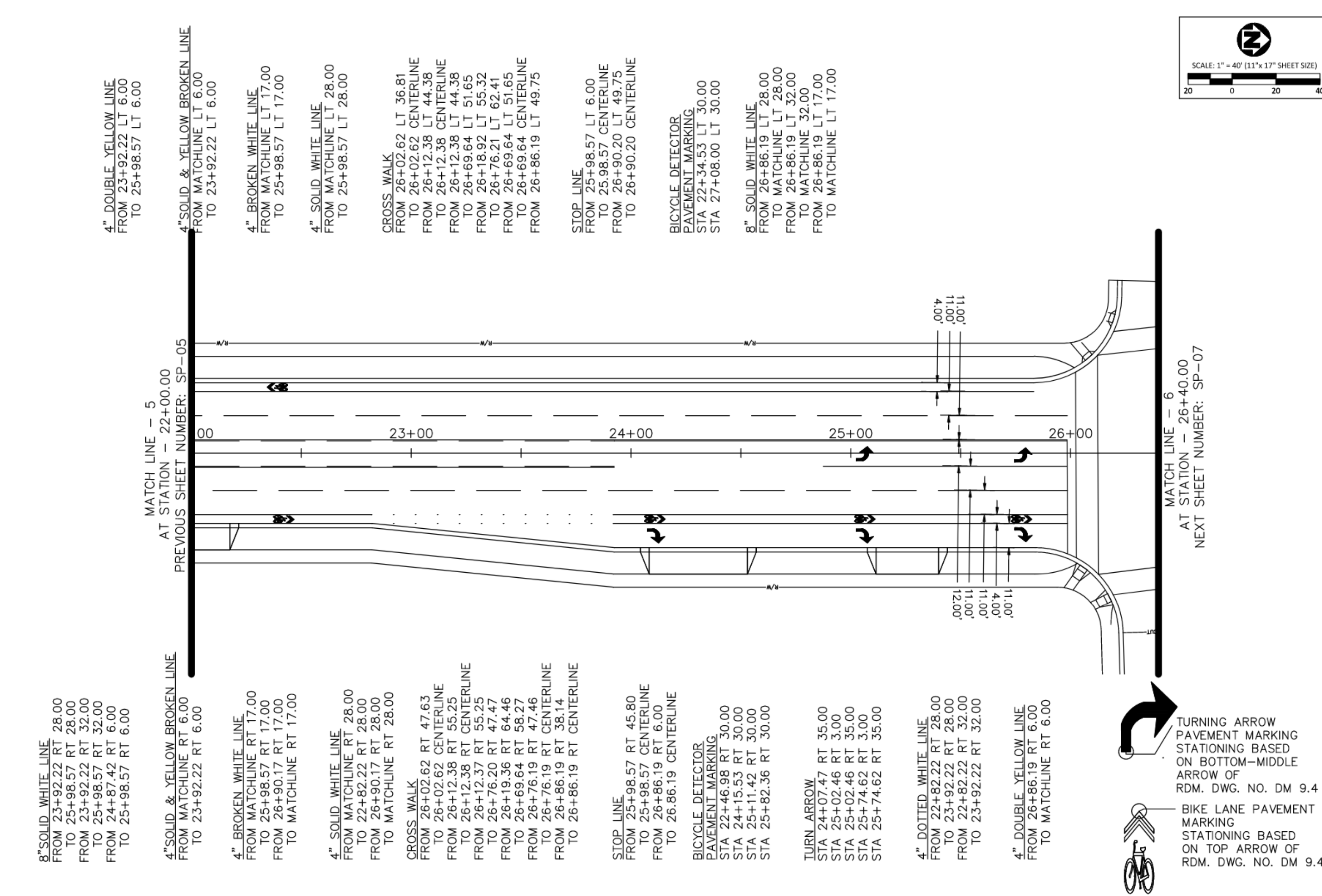
ROADWAY



DRAINAGE



SIGNING AND STRIPING



REFERENCES

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