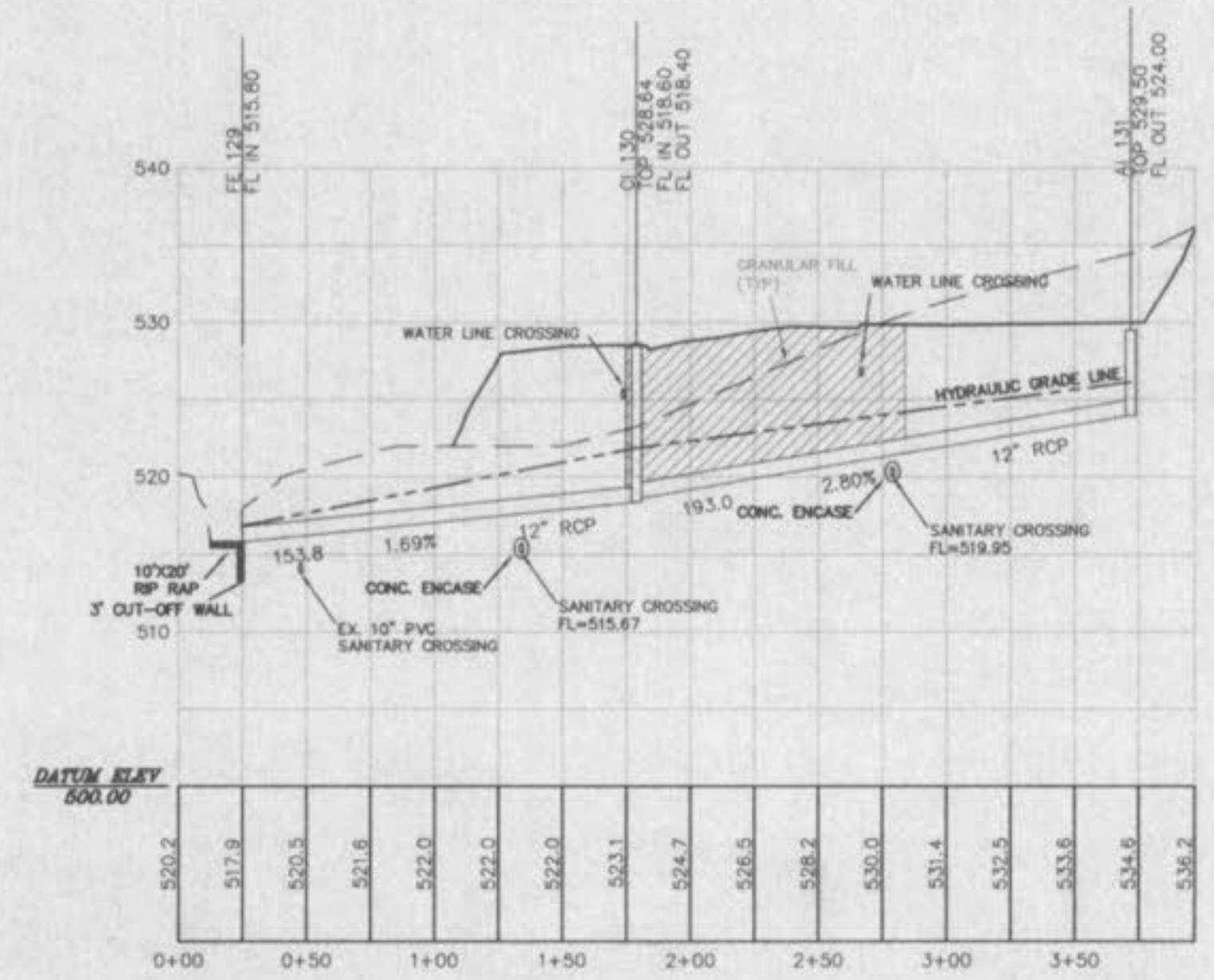
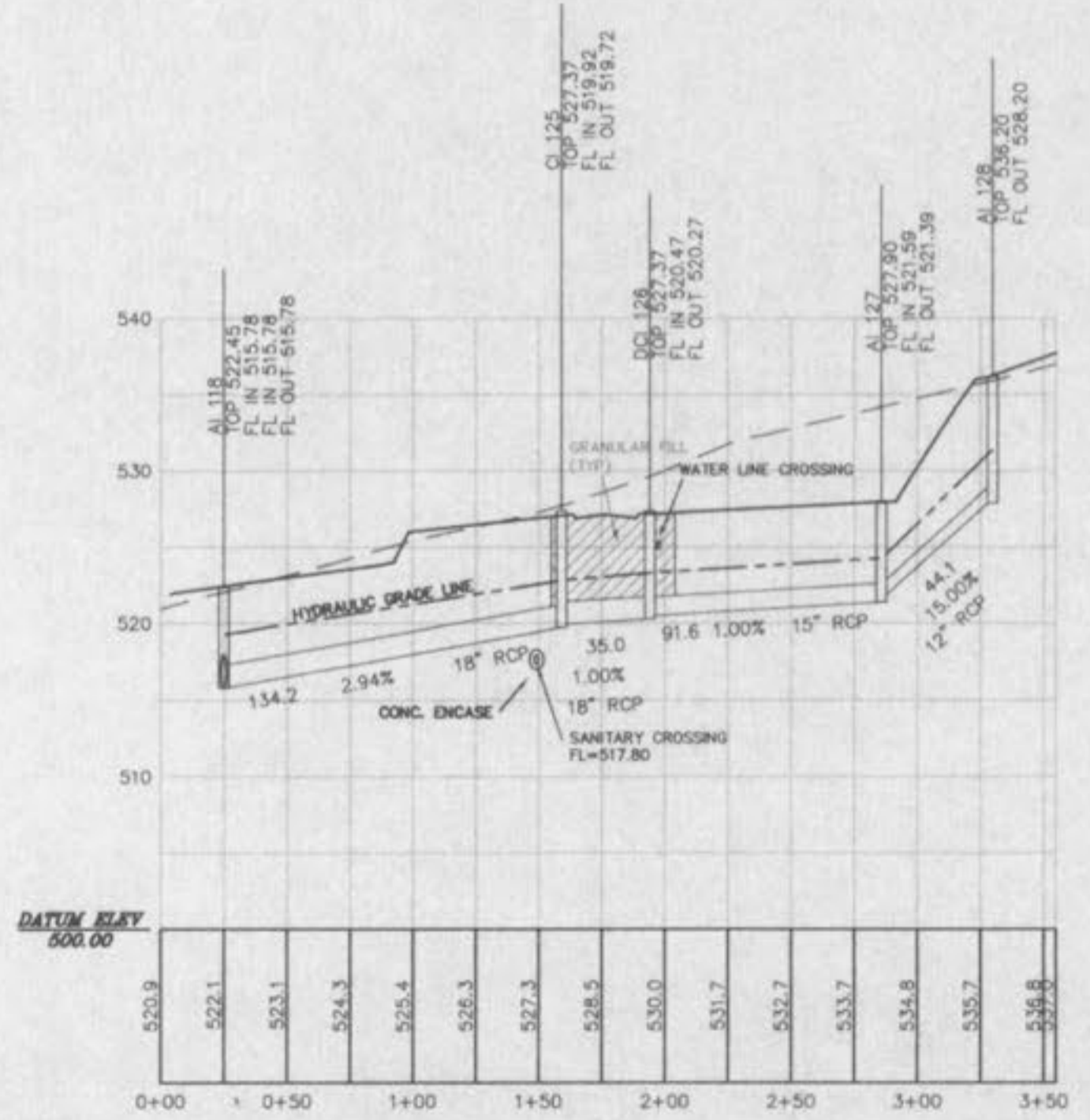


VERT. 1"=10'
HORIZ. 1"=60'
SCALE:



ADDITIONAL STORM SEWER CONSTRUCTION NOTES FOR ST. CHARLES COUNTY
Concrete pipe joints shall be MSD Type "A" approved compression-type joints and shall conform to the requirements of the Specifications for joints for Circular Concrete Sewer and Culvert Pipe, using Flexible, Watertight, Rubber-type Gaskets ASTM D443. Band-type gaskets depending entirely on cement for adhesion and resistance to displacement during jointing shall not be used.

All storm sewer pipes shall be reinforced concrete pipe, Class II minimum. Any concrete pipe, conduit, or culvert beneath a street right-of-way or with reasonable probability of being so located shall be a minimum of Class III, but also shall account for all vertical loads. In no case shall the design provide for less than HS-20 loading per AASHTO. For other locations, the minimum design live load shall be the HS-10 loading.

Storm sewer pipes that cross over existing or proposed sanitary sewer trenches shall be cradled in concrete through the full width of the sanitary sewer trench. The trench shall be backfilled and compacted with granular fill to the bottom of the concrete cradle.

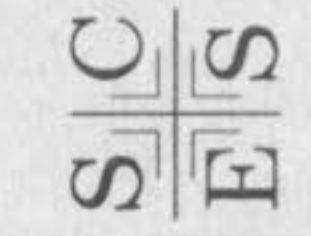
If the storm and sanitary sewer are parallel and in the same trench or overdig, the upper pipe shall be placed on a shelf and the lower pipe shall be bedded in compacted granular fill to the flow line of the upper pipe.

All area inlets shall be open on 4 sides unless otherwise noted on the plans.

REVISED PER O&D COMMENTS
09/28/03
REVISED PER CITY OF SHARONVILLE AND ST. CHARLES COUNTY COMMENTS

**IMPROVEMENT PLANS
PEACEFUL VALLEY
STORM PROFILES 2**

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448



Michael J. [Signature]
7/25/03

ORDER NO. 02-0890
DATE 07/25/03
7A