The Quality Pathway - Defect Avoidance

MORGAN SINDALL CONSTRUCTION

Roads / Hardstandings - Concrete

To facilitate this ambition of getting the quality right, these checks should take place:

- > Ensure formation suitable and to specification (proof rolling/vane, etc.)
- > Have all services / ducts and drains required been installed?
- > Determine which materials need frost susceptibility checking. This test can take several weeks
- Ensure the capping is to specification, e.g. material, thickness, compaction, (proof rolling/ Californian Bearing Ratio (CBR) etc.
- > Ensure sub-base is to specification e.g. material, thickness, compaction, (proof rolling / CBR etc.). Is the surface tolerance compatible with the overlying layers?
- > Note that a 'Type 1' material requires grading certificate
- > Consider changing to a higher quality material to allow continuity in poor weather
- Consider what geotextiles / geogrids are required as part of the designed solution, has a manufacturers' design (Tensar for example) been checked by MSPS / Design Team?
- > Compaction of materials other that Type 1 requires close control of moisture content
- > Ensure joint positions have been properly considered

Allow for movement against curbs, manholes, gullies etc.

- > Ensure dowel bars fitted with compression caps in expansion joints and that they are grout tight
- Ensure dowel bars are level, square, parallel and to specified accuracy. Also properly coated including underside and correct number of coats of specified debonding material
- > Check that sufficient anti crack bars are detailed at manholes / gullies
- > Do not use flexcell, etc. without the support of a shutter
- > Cure concrete very well. Consider polythene as well as spray applied membrane
- > Saw cut any joints as soon as possible after hardening max 24 hours, depending on materials. Too soon will pluck out the aggregates
- Ensure rebates for sealants are sufficient and that the correct sealants are specified and applied properly
- > Can sub-base withstand the loads from construction traffic / plant?
- > Ensure all pokers are in good working order before pouring
- Obtain approval of mix design (air entrainment, additives)

