

**Laymen's Terms
For
"Engineerese"**

Advertisement – notice to bidders of upcoming work from the FDOT.

ADT (Average Daily Traffic) – the number of vehicles on the road each day.

Aggregate – rock.

Anchor bolts – heavy duty connector.

Approach Slabs – concrete transition from road to bridge.

Attenuator – drum.

Backfill – to refill (a hole).

Base course – bottom layer of pavement.

Beams – steel or concrete that provides horizontal support for a bridge, between the columns.

Berm – mound of earth/dirt.

Bidder – a pre-qualified contractor applying for FDOT construction projects.

Bituminous – relating to asphalt (bitumen).

Borrow – dirt or similar material.

Box Culverts – a large rectangular pipe (for water flow).

Casings – form or an object used to place a pipe under an existing road without affecting traffic.

CEI firm – consulting company who oversees a DOT construction project.

Change Order – document detailing any changes in a contract.

Claim – legal document filed by a contractor when an agreement can not be made regarding a change in scope of work, price, etc.

Clearing & Grubbing – removal of trees, stumps, roots, etc.

Cofferdams – temporary watertight structure. Used to keep an area pumped dry so a bridge, dam or pier can be built.

Compacting – (compress) to make more dense.

Conduit – pipe or channel.

Contra-flow lane – a lane on which, during certain hours of the day, traffic moves in a different direction than the normal traffic flow.

Controlling work items – major work item.

Corner Clips – land purchased to keep line of sight at intersections.

Crack Relief (layer) – layer of tar and stone used to prevent cracks from progressing from an old layer of asphalt to a new layer of asphalt.

Cross-Section – cut away view of a road.

Culvert – drain or pipe.

Curb & Gutter – a concrete structure at the edge of pavement (usually in urban areas) which directs rain water away from the roadway, to designated points.

Delineators – markers.

Ditch Pavement – material used to line a channel to carry water.

Drainage Structure – any man-made feature to collect or carry rain water.

Drilled Shafts – a vertical bridge foundation.

Edgedrain – a drainage system used to remove water from the road.

Embankment – dirt, rubble or other earthen material.

Emulsified – used to describe liquid asphalt mixed with water.

Encroachment – when something is where it shouldn't be.

Expansion Joint – a designed gap in concrete structures.

Ferrous Materials – iron-like or iron-containing materials

Filter fabric – cloth-like material used to keep out dirt or other unwanted material.

Final Estimate – last payment to the contractor after all work is completed.

Fine aggregates – sand or very small rocks.

Footings- supports.

French drains – perforated underground pipe, surrounded by rock or gravel.

Friction Course – final layer of asphalt (allows water runoff).

Geotextile fabrics (plastic filter fabric) – cloth-like material used to keep out dirt and other unwanted materials.

Graduation – means of defining and sorting rock sizes.

Graded aggregate base – leveled rock base.

Ground tire rubber – recycled rubber used in road pavement.

Inlets – storm water collection devices

Junction box - where pipes come together, normally not visible

Leveling course - an asphalt layer used to correct asphalt slope and remove rutting

Liquidated damages - fines (charged by FDOT when work is not completed on schedule)

Loop detectors - wires in the pavement to detect vehicles, usually used at traffic signals

Maintenance of Traffic (MOT) - safety requirements (to maintain a safe roadway)

Median - a traffic separator between opposing traffic (grass, concrete or other)

Miami oolite limerock (oolite) - a type of rock used in road construction. In Florida, found mostly in the southern part of the state.

Milling - pavement removal by grinding

Muck - dirt (unsuitable for roadbed construction)

Obliterate - delete, erase, or remove

Obstructions - anything in the way

One-way pair - two one-way streets which run in opposite direction, but carry the same route number

Optional base course - choice of material used in road construction give to the contractor

Pies - supports driven into the ground to hold up bridges, piers, etc.

PD&E study - a study of the design alternatives for transportation projects

Pre-stressed piles - type of bridge foundations

Prime coat - a layer of liquid asphalt between the pavement and road foundation

Prime contractor - head contractor

Qualified Products List (QPL) - materials/items approved by FDOT for use in the construction and maintenance of transportation facilities

Reclaimed Asphalt Pavement (RAP) - asphalt made from a combination of new and old asphalt.

Reflective Pavement Markers (RPM) – reflectors

Rework limerock – recycling the existing rock

Right of Way – land where a public road, utility, etc. is located

Riprap – concrete block, rubble, sand bags, etc. used to prevent erosion

Roadbed – foundation of the road, (rock, dirt, etc.)

Roadway – the part of a road, including shoulders, traveled on by vehicles

Rubber Membrane (interlayer) – layer of tar, rubber, and stone used to prevent cracks from progressing from an old layer of asphalt to a new layer of asphalt.

Rubble – rock or broken concrete

Screenings – fine material from a rock crushing operation

Sediment Basins – dirt trap, usually used during construction

Sheet Piles – temporary retaining wall

Shop Drawings – engineering plans prepared by the contractor

Shoulder – narrow (8 –12 feet) strip of land along the edge of a paved road

Sight Distance – the ability to see without objects obstructing your view

Slag – by-product of blast furnace operations, used in road pavement

Slope Drains – a structure used to carry water off a high elevation

Slope Pavement – material used to protect a slope from erosion

Slurry – water mixture

Special Provisions – additional directions to the contract not already specified

Specifications – instructions for road and bridge construction

Stabilizing – strengthening (soils)

Standards – minimum construction requirements

Stripes – painted lane markings

Subbase – the natural layer of strengthened material at the bottom of the roadbed

Subgrade – leveled dirt or rock used for a road foundation

Subsoil excavation – removal of undesired material

Substructure – a support, base or foundation (for a structure)

Superpave – Super Performing Pavements – a group of durable high strength asphalt pavements

Superstructure – the part of a structure above the foundation

Supplemental Agreement – contract addendum (for additional work of materials)

Surety – liability

Tack coat – sticky layer of liquid asphalt between two layers of solid asphalt

Thermoplastic – long life reflective paint

Topsoil – top layer of soil (surface soil)

Traffic Control Devices – drums, cones, barricades, signs, etc.

Traffic separator – a low concrete divider between travel lanes

Transverse joints – a designed gap in concrete structures running the same direction as traffic

Travel way – part of road vehicles use, does not include shoulders and auxiliary lanes

Turnout – pavement placed on a grass shoulder, typically at driveway entrances, to aid vehicles exiting the street or roadway

Type A fence – farm fence

Type B fence – chain link fence

Type S Asphalt – load-bearing asphalt course

Typical Section – a cutaway of a section of the roadway

Value Engineering Change Proposal (VECP) – cost reduction proposal made by the contractor

Weep holes – a designed hole usually in concrete structures to alleviate water pressure